

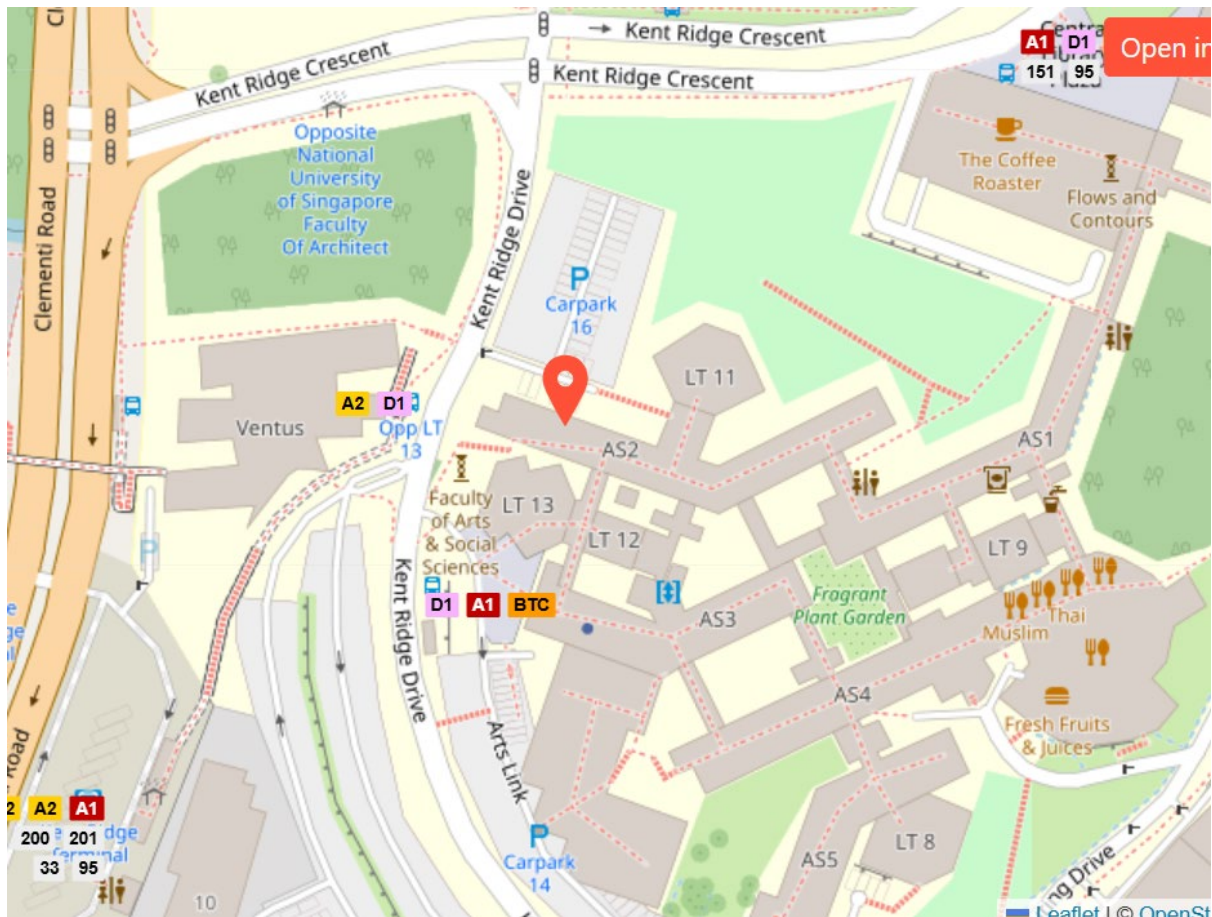


## Campus Map

### Earth Lab AS2 #02-03/04

NUS Department of Geography, 1 Arts Link, Block AS2, Singapore 117570

EarthLab on Level 2, Room 3&4



On Day 1 upon arrival, proceed to the registration table. Identify yourself by your **First Name** for **ID lanyard card collection**.

Participants are encouraged to wear the lanyards on both days for identification purposes.

School participants who are also attending the conference will reuse the lanyards for the conference.

## Housekeeping Instructions

### Important Notes for Attendees



#### Bring Your Own Laptop

- Presenters must bring their own laptop (and charger) if using visual aids.
- The venue provides HDMI cables.
- MacBook users: Please bring an adapter.



#### Bring Your Own Bottle

- In line with NUS's commitment to sustainability, bottled water will not be provided.
- Water coolers are available near the Earth Lab.



#### Meal Information

- All meals provided are Halal with limited vegetarian options.
- We regret that we cannot accommodate other dietary requirements/preferences.


### Guest WiFi

- Connect to "NUS\_Guest" wireless network
- Select "Event Login" at the login page
- Enter the Wi-Fi PIN that's provided below
  - Wi-Fi PIN: **U01WAS**
  - Validity: From 24 - 25 February 2025

### Buffet Dinner at Ginger, PARKROYAL on Beach Road

We are delighted to host a buffet dinner for all attendees on:

 Monday, 24 February 2025

 18.30

 Ginger, PARKROYAL on Beach Road



Source: Pan Pacific (<https://www.panpacific.com/en/hotels-and-resorts/pr-beach-road/eat/ginger.html>)

## Bus Transportation to the Dinner Venue

To facilitate your journey, we have arranged one-way transport to the dinner venue.

The buses will depart at **18.00** from **AS7 Shaw Foundation Building** (5 Arts Link, Singapore 117570). *Please refer to the image below.*

Please join us as we proceed from the Earth Lab to the pickup point (about 3-5min walk) after the last panel on day 1.



Bus pick-up point: AS7 Shaw Foundation Building (5 Arts Link, Singapore 117570)

## ***Program at a glance***

### Monday 24 February

9.00-9.30 Registration

9.30-11.00 **Welcome: FinGeo History and Seven Habits of Successful Researchers**

by *Dariusz Wójcik*

11.00-11.30 Coffee/tea break

11.30-13.00 **Theory development in financial geography**

13:00-14.00 Lunchbreak

14.00-15.30 **Methodologies in financial geography**

15.30-16.00 Coffee/tea break

16.00-17.30 **Financial geography and interdisciplinary space**

18.00 Departure for dinner

### Tuesday 25 February

9.30-11.00 **Financial geographies in Asia and the Global South**

11.00-11.30 coffee/tea

11.30-13.00 **Keynote** by *Franziska Sohns*

13:00-14.00 Lunchbreak

14.00-15.30 **Writing and publishing in financial geography**

15.30-16.00 Coffee/tea break

16.00-17.30 **Research impact and financial geography**

## ***Instructions on panels***

The core of the program are six panel sessions, with every early career participant in the School assigned to one panel. The allocation was based on re-reading the applications of the participants, and reflecting on which panel would best fit individual profiles. The basic idea for panels is that every panelist, as well as the chair, would have about 5 minutes to share their thoughts. With 7-8 people on each panel, this would leave about half of the session time for general discussion with everyone else in the room. PPT use is unnecessary but possible. To ensure efficient and effective interaction, we will use an online platform <https://onlinequestions.org/>, so that everyone in the room could post their questions during the event. To prepare for the panels, please familiarise yourselves with the indicative questions in the program, possibly with the help of the suggested reading list. You can also reflect on your work and research experience to come up with a brief response and other questions to stimulate further discussion.

## ***Indicative questions for panels***

1. Theory development in financial geography
  - a. How to write a good theory section for your paper?
  - b. How to change and make theories in financial geography?
  - c. Should financial geography have a theoretical cannon?
2. Methodologies in financial geography
  - a. What is your view of the range and depth of methods in financial geography? How has it evolved over time?

- b. To what extent is the relationship between quantitative and qualitative methods in financial geography productive? How could it be improved?
  - c. What methodological innovations could enrich financial geography?
- 3. Financial geography and interdisciplinary space
  - a. What is the evolving position of financial geography within geography as a whole?
  - b. What fields outside geography should financial geography collaborate more with and why?
  - c. What relationships should financial geography develop with financial economics and business schools?
- 4. Financial geographies in Asia and the Global South
  - a. What topics in financial geography of Asia and the Global South are established; which are emerging; and which are neglected?
  - b. How can we build new theories based on financial geography in/of Asia and the Global South?
- 5. Writing and publishing in financial geography
  - a. Where can financial geography be published?
  - b. What are the pros and cons of writing books versus papers?
  - c. How to engage in the peer review process?
- 6. Research impact and financial geography
  - a. Where beyond academia can financial geography make a difference?
  - b. What are the trade-offs involved in having an impact on policies and strategies?
  - c. What role and place is there for activist financial geography?

### ***Chairs and panelists***

#### **Theory development in financial geography**

Nathan Green (Chair)  
 Liam Keenan  
 Hannah Hasenberger  
 Juergen Braunstein  
 Paweł Węgrzyn  
 Yustina Octifanny  
 Cheng Fang

#### **Methodologies in financial geography**

Franziska Sohns (Chair)  
 Dasom Hong  
 Swisa Pongpech  
 Yifan Qi  
 Baoyan Han  
 Kevin Poisson  
 Marnie Cruickshank  
 Liam Keenan

### **Financial geography and interdisciplinary space**

Emma Mawdsley (chair)  
James Sidaway  
Saira Ahmed  
Narek Mirzoyan  
Jing Chu  
Junguo Qu  
Jiwon Kim  
Elsie Hu

### **Financial geographies in Asia and the Global South**

Gordon Tan (chair)  
Nathan Green  
Nethmi Bathige  
Tomas Nougues  
Anu Jogesh  
Anurag Das  
Emma Galbraith

### **Writing and publishing in financial geography**

Dariusz Wójcik (chair)  
Shaun Lin  
Chloe Fox-Robertson  
Maciej Mróz  
Maria Theresa Anna Robles  
Ulysses Pascal

### **Research impact and financial geography**

Silvia Grandi (chair)  
Theodor Cojoianu  
Manishankar Prasad  
Tra-My Tran  
Ian Robertson  
Liam Reeve  
Alena Dolgova  
Jamie Linsley-Parish

### ***A selective reading/re-reading list***

This short collection of readings is neither definitive nor exhaustive, but will hopefully help discussions at the FinGeo School. There are readings on the list that concern every topic of our panel discussions. PDFs of all of these readings are provided. We intentionally did not include books, to make reading more feasible, and focused on articles published over the last five years. We encourage you to prioritize any that are not familiar to you.

- Aalbers, M. (2020). Financial geography III: The financialization of the city. *Progress in Human Geography* 44(3), <https://doi.org/10.1177/030913251985392>.
- Bassens, D., Knox-Hayes, J., Lai, K., Pan, F., Wójcik, D. (2024). Finance in the age of geoeconomics: intersections of finance, production, and digital technology. *Finance & Space*, <https://doi.org/10.1080/2833115X.2024.2433898>.
- Christophers, B., Bigger, P., Johnson, L. (2020). Stretching scales? Risk and sociality in climate finance. *Environment and Planning A: Economy and Space* 52(1): 88-110, <https://doi.org/10.1177/0308518X188190>.
- Clark, G.L., Wójcik, D. (2024). Stylised facts and close dialogue redux. *Environment and Planning F* 3(1-2), <https://doi.org/10.1177/26349825241255689>.
- Dörry, S., Wójcik, D., Lai, K., Aalbers, M. (2023). Lost (in) space for dialogue: On the (abandoned) need for working papers in human geography. *Environment and Planning F* 2(3), <https://doi.org/10.1177/26349825231164618>.
- Fernandez, R., Aalbers, M. (2020). Housing financialisation in the global south: In search of a comparative framework. *Housing Policy Debate* 30(4): 680-701, <https://doi.org/10.1080/10511482.2019.1681491>.
- Green, N. (2022). Financing agrarian change: Geographies of credit and debt in the global south. *Progress in Human Geography* 46(3): 849-69, <https://doi.org/10.1177/03091325221083211>.
- Lai, K. (2023). Financial geography I: The state-finance nexus. *Progress in Human Geography* 47(4), <https://doi.org/10.1177/03091325231170756>.
- Lai, K., Lin, S., Sidaway, J. (2020). Financing the Belt and Road Initiative (BRI): Research agendas beyond the “debt-trap” discourse. *Eurasian Geography and Economics* 61(2): 109-24, <https://doi.org/10.1080/15387216.2020.1726787>
- Lai, K., Pan, F., Sokol, M., Wójcik, D. (2020). New financial geographies of Asia. *Regional Studies* 54(2): 143-48 (special issue editorial), <https://doi.org/10.1080/00343404.2019.1689549>.
- Mawdsley, E., Taggart, J. (2022). Rethinking d/Development. *Progress in Human Geography* 46(1), <https://doi.org/10.1177/03091325211053115>.
- Sparke, M., Sidaway, J.D., Bunnell, T., Grundy-Warr, C. (2004) Triangulating the borderless world: geographies of power in the Indonesia-Malaysia-Singapore Growth Triangle. *Transactions of the Institute of British Geographers* 29, 485-498.
- Wójcik, D. (2022). Financial geography III: Research strategies, designs, methods and data. *Progress in Human Geography* 46(1): 245-54, <https://doi.org/10.1177/03091325211043208>.



Wójcik, D., Bratton, W. (2024). Theory, explanation, and economics in financial geographies. *Dialogues in Human Geography*,  
<https://doi.org/10.1177/20438206241280659>.

Wójcik, D., Bassens, D., Knox-Hayes, J., Lai, K. (2024). Revolution, evolution, progress: Finance & Space manifesto. *Finance and Space* 1(1): 1-12,  
<https://doi.org/10.1080/2833115X.2023.2275952>

### ***FinGeo School 2025 Participants***

Alena	Dolgova	MGIMO University Tashkent
Anu	Jogesh	London School of Economics and Political Science
Anurag	Das	National University of Singapore
Baoyan	Han	National University of Singapore
Cheng	Fang	Durham University
Chloe	Fox-Robertson	University of Manchester
Dariusz	Wójcik	National University of Singapore
Dasom	Hong	University of Oxford
Elsie	Hu	University of Edinburgh
Emma	Galbraith	University of Cologne
Emma	Mawdsley	University of Cambridge
Franziska	Sohns	Anglia Ruskin University Cambridge
Gordon	Tan	Singapore University of Technology & Design
Hannah	Hasenberger	University of Cambridge
Ian	Robertson	University of Oxford
James	Sidaway	National University of Singapore
Jamie	Linsley-Parrish	University of Oxford
Jing	Chu	Durham University
Jiwon	Kim	University of Edinburgh
Juergen	Braunstein	Vienna University
Junguo	Qu	National University of Singapore
Kevin	Poisson	University Paris Cite
Liam	Keenan	University of Nottingham
Liam	Reeve	University of Hong Kong
Maciej	Mróz	Warsaw School of Economics
Manishankar	Prasad	University of Malaya
Maria Theresa Anna	Robles	University of the Philippines Diliman
Marnie	Cruickshank	Griffith University & University of Newcastle
Narek	Mirzoyan	Karlsruhe Institute of Technology
Nathan	Green	National University of Singapore
Nethmi	Bathige	Penn State University
Pawel	Węgrzyn	Warsaw School of Economics
Saira	Ahmed	Goethe University Frankfurt
Shaun	Lin	National University of Singapore
Silvia	Grandi	University of Bologna
Swisa	Pongpech	University of Oxford
Theodor	Cojoianu	University of Edinburgh
Tomas	Nougues	UNSAM/CONICET Argentina
Tra-My	Tran	Anglia Ruskin University Cambridge
Ulysses	Pascal	Vrije Universiteit Brussels
Yifan	Qi	University of Edinburgh
Yustina	Octifanny	National University of Singapore

## FinGeo School; Singapore 2025

## Participant profiles

Name: Alena Dolgova (Alena)  
Pronouns: She/her  
Position/affiliation: Director, Analytical Bureau  
IFC.Digital  
Educational background: PhD in Economics, MGIMO-  
University, 2018  
Place of birth: Moscow, Russia  
Contact: dolgovaalena@gmail.com



### **What I work on:**

The creation and development of international financial centers with a focus on assessing and stimulating the macroeconomic effects of the centers' activities on the economy of the country and the host city.

### **How I work:**

Using various academic methods as well as an applied method through consulting the administrations of financial centers, cities, and national governments on financial centre development issues.

### **Why I work on this:**

During my Master's program internship at the National University of Singapore in 2013, I wrote a research paper on Singapore's experience in developing international financial centers for the benefit of the national economy. This sparked my interest in the topic and in the role of financial centers as policy tools for implementing investment policy.

### **Apart from financial geography, of course, my main passions in life are:**

Youth empowerment, art history.

Name: Anu Jogesh  
Pronouns: She/her  
Position/affiliation: Doctoral Researcher, London School of Economic and Political Science  
Educational background: MSc, University of Oxford  
Place of birth: New Delhi, India  
Contact: a.jogesh@lse.ac.uk



**What I work on:**

I study climate-related financial risks and community vulnerability in India. I examine the discourse and practices of financial actors on climate risks and sustainable finance, and how they entangle with experiences of climate and financial precarity in rural North India.

**How I work:**

I primarily rely on qualitative and ethnographic methods in my research.

**Why I work on this:**

Prior to my doctoral studies I worked for over a decade and half as a climate policy researcher and adaptation practitioner. I was bothered by the predominantly top-down, techno-managerial approach we employed in implementing adaptation projects in South Asia. More recently, financial institutions' practices to assess risks to their loan books presented contradictions in how finance would reach climate-vulnerable small loan borrowers in South Asia. My academic journey, and resultant thesis, has been an effort at more critically examining the dominant global paradigm on climate and finance across scales.

**Apart from my doctoral studies, of course, my main passions in life are:**

Searching for and enjoying gluten free food, trying new teas, long walks with friends and family, and conversations on art, politics, history with my son.

Name: Anurag Das  
Pronouns: He/him/his  
Affiliation: PhD student, Comparative Asian Studies, National University of Singapore  
Educational background: MA, Peace & Conflict studies, Tata Institute of Social Sciences, India (2017-19)  
Place of birth: Assam, India  
Contact: anuragd@u.nus.edu



**What I work on:**

My PhD research project attempts to do a comparative analysis of border trade towns along Northeast India's border with Myanmar and Bangladesh. It specifically looks at how transnational connectivity infrastructures (roads, railways, bridges, and tunnels) configure these border trade towns as "subaltern" urban spaces and impact the local rural communities' customary land relations.

**How I work:**

Using qualitative method (ethnography) that focuses on changing trends in land transactions. Also, as part of my ethnographic research approach, I am using 'walking as a method' to explore the socio-spatial urban transformation of these contested border trade towns.

**Why I work on this:**

My interest in border studies has evolved over the years through extensive fieldwork experiences with various borderland communities in Northeast India. These experiences have helped deepen my understanding of this region's intricate dynamics, particularly concerning ethnic identity, belonging, migration, and territorial contestation

**Apart from financial geography, of course, my main passions in life are:**

Walking, Documentaries, Music, Playing cricket

Name: Baoyan Han (Olivia)  
Pronouns: She/her/her  
Position/affiliation: PhD student, National University of Singapore  
Educational background: Msc, University College London, 2021  
Place of birth: Guangzhou, China  
Contact: e1322740@u.nus.edu



**What I work on:**

I focus on sustainable finance, particularly examining how the global financial network supports green bonds in driving investments toward renewable energy. My research explores the connections between financial centers, offshore jurisdictions, and institutional investors in facilitating green finance flows, with an emphasis on geographical and economic variations in green bond markets.

**How I work:**

I intend to employ quantitative and network-based analysis, incorporating time-series modeling, regression analysis, and social network analysis to understand financial flows. I also hope to integrate optimization models to assess the efficiency and long-term impact of green bonds in renewable energy investment.

**Why I work on this:**

I am interested in the interplay between finance and sustainability, particularly how global financial networks can mobilize capital for the energy transition. My background in finance and geography led me to explore how green bonds function as a bridge between financial markets and renewable energy projects, shaping the future of sustainable development.

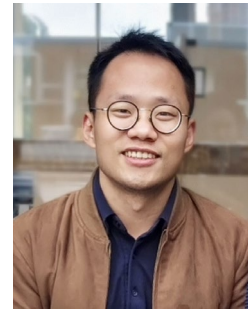
**Apart from financial geography, of course, my main passions in life are:**

Data science, financial derivatives, badminton, travel.

## FinGeo School; Singapore 2025

## Participant profiles

Name: Cheng Fang  
Pronouns: He/him/his  
Position/affiliation: Postdoctoral researcher, Vrije Universiteit Brussel (est. from March, 2024)  
Educational background: PhD, Durham University, 2024  
Place of birth: Anhui, China  
Contact: cheng.fang@vub.be



### **What I work on:**

I conduct research on global financial networks, the political economy of China's cross-border financing, and the development dynamics of financial centres.

### **How I work:**

Quantitative, qualitative, mixed methods, and coffee.

### **Why I work on this:**

I chose these research topics partly due to the serendipitous influences of important people I encountered along my academic journey. That said, I have continued to work on them because they did offer a meaningful/effective point of departure for understanding the environment I live in and the history of the past.

### **Apart from financial geography, of course, my main passions in life are:**

Dry jokes

## FinGeo School; Singapore 2025

## Participant profiles

Name: Chloe Fox-Robertson  
Pronouns: She/Her  
Position/affiliation: PhD Researcher, University of Manchester  
Educational background: BA Geography, University of Oxford, 2022  
MSc Research Methods with Human Geography, University of Manchester, 2023  
Place of birth: Cumbria, United Kingdom  
Contact: chloe.fox-robertson@manchester.ac.uk



### **What I work on:**

FinTech with a focus on gender inequalities within the sector.

### **How I work:**

Using mixed methods, qualitative, and quantitative approaches.

### **Why I work on this:**

I first encountered FinTech during my undergraduate studies and found it fascinating, which made me want to explore it further. I particularly enjoy the interdisciplinary nature of FinTech research and how it allows me to incorporate my interest in feminist geographies.

### **Apart from financial geography, of course, my main passions in life are:**

Swimming, running, travel, and spending time with my family, friends, and dogs!



Name: Dariusz Wójcik (Darek)  
Pronouns: He/him/his  
Position/affiliation: Professor of Financial Geography,  
National University of Singapore  
Educational background: DPhil, University of Oxford, 2003  
Place of birth: Wadowice, Poland  
Contact: [dwojcik@nus.edu.sg](mailto:dwojcik@nus.edu.sg)



**What I work on:**

Almost any topic in financial geography and broader economic geography related to finance, as well as collaborative projects on political economy, urban studies, heterodox and financial economics.

**How I work:**

Using quantitative, qualitative, and mixed methods, with a good degree of mapping and visualisation if appropriate and possible.

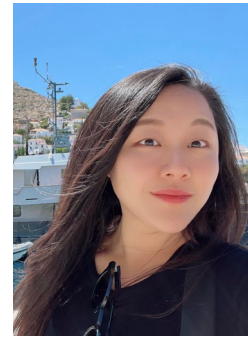
**Why I work on this:**

My first love were economic maps of the world, which led me to economic geography. Studying economics as well led me to finance, and ever since I have wanted to combine finance and geography.

**Apart from financial geography, of course, my main passions in life are:**

Economic history, documentaries, swimming, walking, travel

Name: Dasom Hong  
Pronouns: She/her/her  
Position/affiliation: DPhil Candidate of Geography,  
University of Oxford  
Educational background: M.A., Seoul National University,  
2021  
B.A., Yonsei University, 2019  
Place of birth: Seoul, South Korea  
Contact: dasom.hong@ouce.ox.ac.uk



**What I work on:**

I explore the nature and role of housing in financialised capitalism with the perspectives of financial geography, political economy, heterodox economics, and urban studies. Recently, I've investigated the global housing affordability crisis and inequality at the international scale.

**How I work:**

I use both quantitative and qualitative methods, while mostly relying on (spatial) econometrics and machine learning recently. I also have skills in mapping and visualisation.

**Why I work on this:**

While working as an urban policy researcher in South Korea, I observed how urban landscapes and power relations have transformed in Seoul following the changing financial logic after the Global Financial Crisis (GFC). In particular, commercial gentrification and landlord-tenant conflicts that unfolded in the former planned districts for urban renewal projects, which were cancelled after the GFC, sparked my academic interest in financialization in urban settings and led me to financial geography and political economy.

**Apart from financial geography, of course, my main passions in life are:**

Political economy, alternative housing finance activism, travel, and films

Name: Elsie Hu  
Pronouns: She/her/hers  
Position/affiliation: PhD in Finance-Year 1, University of Edinburgh  
Educational background: MRes, University of Edinburgh Business School, 2024  
Contact: elsie.yh.hu@ed.ac.uk



**What I work on:**

I study corporate greenwashing across regulatory landscapes, examining how firms exploit geographic variations in ESG oversight. I also explore how human-large language model (LLM) partnerships can enhance cross-border sustainability monitoring.

**How I work:**

Combining geographic analysis with interpretable LLMs to study cross-border corporate sustainability claims and regulatory gaps, while integrating stakeholder feedback.

**Why I work on this:**

My research began with readability in education, moved to ESG and assurance reports, and now focuses on monitoring corporate greenwashing with LLMs.

**Apart from financial geography, my main passions in life are:**

Exploring museums, swimming, and attempting to cook everything in a microwave.

Name: Emma Galbraith  
Pronouns: She/her/hers  
Position/affiliation: Research associate and PhD candidate,  
University of Cologne  
Educational background: MSc, University of Cologne, 2023  
Place of birth: Ahaus, Germany  
Contact: emma.galbraith@uni-koeln.de



**What I work on:**

In my PhD research, I explore how Singapore is strengthening its global economic position by becoming a hub for green finance as well as carbon services and trading in Southeast Asia. I focus on the role of state capitalism in this process, the factors driving these developments, and their impacts – particularly in relation to Vietnam.

**How I work:**

I primarily use qualitative methods, including interviews and document analysis, with the potential to integrate other approaches as the research develops.

**Why I work on this:**

I'm particularly intrigued by how the state shapes global production and financial networks not just through regulation or promotion, but by actively engaging in the economy. Exploring these dynamics inspires my research, and I'm excited to deepen my understanding at the school and conference.

**Apart from financial geography, of course, my main passions in life are:**

Cooking and trying out new recipes, cycling, jogging, travelling, reading and occasionally helping out in our family restaurant

Name: Emma Mawdsley  
Pronouns: She/her  
Position/affiliation: Head of Department of Geography, University of Cambridge  
Educational background: BA and PhD, St John's College, Cambridge  
Place of birth: United Kingdom  
Contact: eem10@cam.ac.uk



**What I work on:**

I moved from close research into environmental and regional politics in India, to various aspects of global development, including South-South Cooperation, UK aid and development policy, finance and financialisation, and contractors and consultants in development.

**How I work:**

Above all, collaboratively. I learn so much from my colleagues, faculty and postgraduate students alike, and from research teams with whom I work. While I mainly work with qualitative methods, this has widened my access to other methods and approaches.

**Why I work on this:**

Initially, because of brilliant teachers in my degree programme, including my PhD supervisor, Professor Stuart Corbridge. And then genuine fascination and curiosity – asking questions, questioning some answers.

**Apart from economic geography, of course, my main passions in life are:**

Rowing, cycling, my two small dogs, reading, having fun!

Name: Franziska Sohns  
Pronouns: She/her/hers  
Position/affiliation: Associate Professor in Economic Geography, Anglia Ruskin University  
Educational background: Dr. rer. nat., University of Cologne, 2017  
Place of birth: Hameln, Germany  
Contact: Franziska.sohns@aru.ac.uk



**What I work on:**

My research centers on themes within economic and financial geography, with a strong emphasis on the intersection of entrepreneurship, resilience, inequalities, and inclusive growth. I am committed to translating my research into innovative and actionable insights that address pressing societal challenges and create a tangible impact in the real world.

**How I work:**

I use quantitative methods, including multi-level regression analysis, survey design, and data integration, combining primary and secondary data to explore complex questions. My work incorporates geospatial analysis, evaluation and intervention studies, and data visualization. I actively engage with stakeholders to validate findings and co-create research to ensure that my research has a real-world impact.

**Why I work on this:**

I approach my work with a profound curiosity, driven by my passion for understanding the intricate systems that shape the world we live in. Growing up with a fascination for maps and technology, this curiosity has been a constant in my life, fueling my desire to uncover hidden dynamics and develop actionable strategies to tackle societal challenges.

**Apart from financial geography, of course, my main passions in life are:**

Politics, Si-Fi, traveling, hiking, karaoke, volunteering.

Name: Kuo Siong (Gordon) Tan  
Pronouns: He/him/his  
Position/affiliation: Assistant Professor  
Singapore University of  
Technology and Design  
Educational background: PhD, University at Buffalo, 2019  
Place of birth: Singapore  
Contact: kuosiong\_tan@sutd.edu.sg



**What I work on:**

Multifarious manifestations of financial platforms, especially on fintech and blockchain topics, and their influence in shaping sustainability, digital work and the economy in general.

**How I work:**

Mostly qualitative, but exploring the use of social media data in my methodology toolkit!

**Why I work on this:**

My original goal to work as a bank analyst did not work out, but the ever-changing face of finance and its digitalization continues to fascinate me.

**Apart from financial geography, of course, my main passions in life are:**

Electronic gadgets, yoga, running, reading on my Kobo

Name: Hannah Hasenberger  
Pronouns: She/her  
Position/affiliation: Teaching Associate in Economic Geography, University of Cambridge  
Educational background: PhD, University of Hertfordshire, 2024  
Place of birth: Vienna, Austria  
Contact: hh624@cam.ac.uk



**What I work on:**

I am interested in how state actors interact with financial markets at different geographical scales; a more recent interest is in housing, in particular affordability crises in private rental markets in the UK

**How I work:**

I use both qualitative (mainly interviews) and quantitative research methods (econometrics as well as descriptive analysis and visualisations). I am interested in how we can integrate or combine different methods in trying to explore causal research questions.

**Why I work on this:**

My research is driven by the desire to make sense of the social and economic world around me – for example, understanding why local governments seem to increasingly resort to using financial instruments in their governance, with varying outcomes. I see economic geography as a lens through which to understand the world, which acknowledges that the tangible things that happen around us are shaped by (and shape) processes at different geographical scales.

**Apart from financial geography, of course, my main passions in life are:**

Food (both cooking and eating – keen to accept food recommendations for Singapore!), cycling, reading (anything from historical and science fiction to geopolitics, and a recently discovered interest in the ‘Material World’ (Ed Conway))



Name: Ian Robertson  
Pronouns: He/him/his  
Position/affiliation: Founder, OxProx  
Educational background: DPhil, University of Oxford, 2024  
Place of birth: Vancouver, Canada  
Contact: [ian.robertson@kellogg.ox.ac.uk](mailto:ian.robertson@kellogg.ox.ac.uk)  
[ian.robertson@oxprox.org](mailto:ian.robertson@oxprox.org)



**What I work on:**

My day job is as an investment portfolio manager offering responsible investment services to retail investors. [OxProx](#) is a social venture spinoff from Oxford that brings transparency to institutional proxy voting including on ESG issues. My research focusses on proxy voting on ESG issues, including geographic biases.

**How I work:**

My thesis used mixed methods but emphasized the quantitative side. The OxProx database aims to be a rich data source for future research.

**Why I work on this:**

Through my day job I have experienced how difficult it is to vote thoughtfully on the many ESG issues brought forward to companies by shareholders. The issues are complex, and the voting system is antiquated. Large institutional investors manage their way through, but my research identified wide variation in their voting according to investor type, size, and geography. The OxProx database brings transparency to proxy voting – a first step in improving accountability – and serves as a rich source of geographically-tagged voting data for future research.

**Apart from economic geography, of course, my main passions in life are:**

Masters swimming (I'll compete in Singapore in August), travel, gardening.

Name: James Derrick Sidaway  
Pronouns: He/him/his  
Position/affiliation: Professor of Political Geography, National University of Singapore  
Educational background: PhD, Royal Holloway University of London, 1992  
Place of birth: Birmingham, UK  
Contact: [geojds@nus.edu.sg](mailto:geojds@nus.edu.sg)



**What I work on:**

Diverse topics in political geography, including, but not only, borders, sovereignty and [critical] geopolitics, and their overlaps with aspects of financial, social-cultural and urban geography. Plus the history of geographic thought.

**How I work:**

Mostly in archives *and* ethnographically. I am committed to mapping.

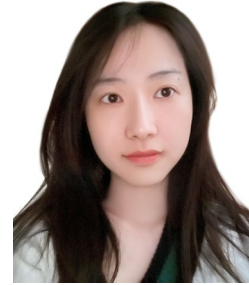
**Why I work on this:**

Because around the age of 14 I decided not to become (my initial plan) a marine biologist – for I was too drawn by questions of politics and space. Hence to political geography.

**Apart from financial geography, of course, my main passions in life are:**

Nature - forests, fish and flowers; Travel - latterly focused on Andalucía and the Hijaz; Walking.

Name: Jing Chu  
Pronouns: She/Her/hers  
Position/affiliation: Postgraduate Researcher of  
Financial Geography, Durham  
University  
Educational background: PhD in Human Geography (in  
progress), Durham University;  
MSc in Banking and Finance  
(Merit), Newcastle University  
Place of birth: Jiangsu, China  
Contact: jing.chu@durham.ac.uk



**What I work on:**

I focus on the intersection of human geography and finance, with particular attention to central bank digital currencies (CBDCs), FinTech, cross-border transactions, and the social dimensions of digital payment systems.

**How I work:**

I utilise quantitative, qualitative, and mixed methods, making use of thematic analysis and visualisation whenever suitable and feasible.

**Why I work on this:**

My background in accounting, banking, and finance drew me to explore the nuances of capital flows in modern society. This complexity inspires my research into the processual and transitional geography of money and finance.

**Apart from financial geography, of course, my main passions in life are:**

Political economy, being a mom, swimming,

Name: Jiwon Kim  
Pronouns: She/him/his  
Position/affiliation: PhD candidate in Finance,  
University of Edinburgh  
Educational background: MSc, University of Edinburgh,  
2022  
Place of birth: Ganwon, South Korea  
Contact: jkim5@ed.ac.uk



**What I work on:**

I specialize in examining the intersection of fossil fuel dependency and company risk across various global contexts. My research focuses on how companies manage climate change issues and the geographical disparities in their financial strategies.

**How I work:**

I employ quantitative methods to analyze data, often using Stata when it's suitable for the dataset at hand. My approach is detailed and methodologically sound, ensuring that the insights I generate are both robust and actionable.

**Why I work on this:**

My primary interest lies in the strategies companies adopt to address climate change, particularly how these strategies vary from one region to another. This interest stems from a broader concern for environmental sustainability and its implications for future economic stability.

**Apart from financial geography, of course, my main passions in life are:**

My main passions include traveling, football, and musicals. These activities not only offer relaxation and enjoyment but also enrich my understanding of various cultures and communities. They provide a well-rounded perspective that I bring into my professional endeavours.

Name: Liam Keenan  
Pronouns: He/him/his  
Position/affiliation: Assistant Professor in Economic Geography, University of Nottingham  
Educational background: PhD, Newcastle University, 2017  
Place of birth: Kingston upon Hull, UK  
Contact: liam.keenan1@nottingham.ac.uk



**What I work on:**

A range of economic and financial geography topics including financialization, financial centres, and mergers and acquisitions.

**How I work:**

While predominantly using qualitative methods (semi-structured interviews, focus groups) I also undertake quantitative methods as part of collaborative research. My research is shaped by several theoretical approaches, including geographical political economy, Global Production Networks 2.0, and the Global Financial Network.

**Why I work on this:**

My love for geography started at a young age when learning about different places, cultures, and civilizations at primary school – I was obsessed with Ancient Egypt. This love has only grown over time, with a deep interest in the geographies of the economy, money, and finance leading me down the academic route.

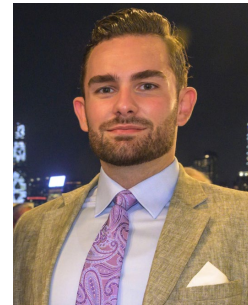
**Apart from financial geography, of course, my main passions in life are:**

Football (Hull City!), weightlifting, dog walking, films

## FinGeo School; Singapore 2025

## Participant profiles

Name: Liam Reeve  
Pronouns: He/him/his  
Position/affiliation: PhD Candidate, University of Hong Kong  
Educational background: MA, *University of Hong Kong* 2020  
BA, *University of British Columbia* 2018  
Place of birth: Vancouver, BC, Canada  
Contact: lreeve@connect.hku.hk



### **What I work on:**

I am passionate about the financial services sector because of its wide reach and impact on economic systems.

In particular, I am interested in how technology in finance (including FinTechs) is altering financial norms within various international financial centres, particularly in Asia.

### **How I work:**

Quantitative, qualitative, and mixed methods.

### **Why I work on this:**

I always loved maps – but surprisingly, I never took a geography course in my undergraduate degree! During my master's, I became interested in how places and spaces are crucial (yet often understudied) elements of why certain phenomena occur. The rest is (geographical) history!

### **Apart from financial geography, of course, my main passions in life are:**

Weightlifting, Hyrox racing, Sailing, Walking, Travel, Southeast Asian cuisine

Name: Maciej Mróz (Maciek)  
Pronouns: He/him/his  
Position/affiliation: Assistant Professor in Economic Geography Department,  
Warsaw School of Economics,  
Warsaw, Poland  
Educational background: DPhil, Warsaw School of Economics, 2019  
Place of birth: Włodawa, Poland  
Contact: maciejmroz@sgh.waw.pl



**What I work on:**

I specialize in energy geography and energy economics, with a primary focus on energy security in the context of energy transition and commodity price volatility. My research spans a wide array of topics, including the economic and geopolitical dynamics of energy markets, the effects of fossil fuel pricing on energy transitions, and the pivotal role of infrastructure in shaping energy security frameworks.

**How I work:**

I take a multidisciplinary approach, utilizing quantitative, qualitative, and mixed methods. My work often incorporates advanced mapping and visualization techniques to uncover and illustrate complex relationships within the energy sector.

**Why I work on this:**

I fully agree that energy lies at the heart of the global economy. This realization has inspired me to explore the subject from broader financial and economic perspectives, which ultimately led me to fall in love with the field of energy geography.

**Apart from financial geography, of course, my main passions in life are:**

Energy economics, marathons and long-distance running, brewing and exploring the art of specialty coffee.

Name: Manishankar Prasad  
Pronouns: He/him/his  
Position/affiliation: PhD Candidate and Researcher,  
University of Malaya  
Educational background: Master of Science in  
Environmental Engineering,  
National University of Singapore,  
2011  
Place of birth: Mumbai, India  
Contact: 22085749@siswa.um.edu.my



**What I work on:**

As a climate and impact finance practitioner-scholar, I work on equity, gender, and racial elements in the structuring of carbon markets and the wider 'transition turn' in SE Asia.

**How I work:**

I am an ethnographer by training and love to listen to marginalized communities at the frontiers of the transition, to gauge the delta between rhetoric in policy documents and the material reality.

**Why I work on this:**

As a practitioner in the global multilateral financing ecosystem on social aspects, where intervention communities are at the margins, questions of embedding equity in the emerging transition animate my scholarship.

**Apart from financial geography, of course, my main passions in life are:**

Travel Writing and walking the back alleys of global cities such as Dubai, Johannesburg, and Mumbai.



Name: Maria Theresa Anna C. Robles  
(Te-Anne)

Pronouns: She/her/hers

Position/affiliation: Assistant Professor, Department  
of Political Science, University of  
the Philippines Diliman

Educational background: PhD, University of Warwick, 2019  
Place of birth: Metro Manila, Philippines

Contact: mcrobles@up.edu.ph



**What I work on:**

International political economy and politics of knowledge production, mainly in relation to risk and uncertainty in regional (East Asia) and global economic governance. I also recently started new work on remittances, which reinforced my growing interest in financial geography

**How I work:**

Qualitative methods, primarily discourse analysis

**Why I work on this:**

I trained as an economist during my undergraduate years and my early professional experience raised a lot of questions on the politics of economic methodology. As I started my career working with regional institutions, this curiosity about the construction of regional-global dichotomies remained ingrained as I crossed over to the academe.

**Apart from financial geography, of course, my main passions in life are:**

I have to confess that I am a new interloper in the field of economic geography! More established passions in life include music and walking aimlessly.

Name: Narek Mirzoyan  
Pronouns: He/him/his  
Position/affiliation: Research Assistant & PhD Candidate, Karlsruhe Institute of Technology, Germany  
Educational background: M.Sc. in Politics, Economics, and Philosophy, University of Hamburg, 2021; M.Sc. in Labour Economics, Armenian State University of Economics, 2015  
Place of birth: Yerevan, Armenia  
Contact: narek.mirzoyan@kit.edu



**What I work on:**

My research focuses on labor economics, economic and financial geography, economic policy, economic growth and innovation studies. I am particularly interested in trade restrictions, AI and labor productivity, gender wage disparities, and the role of the state in economic policy. My current work includes empirical studies using econometric and machine learning techniques to analyze economic and policy impacts.

**How I work:**

I employ a mix of quantitative and qualitative methods, including econometric methods (SCM, IV, DiD, DE, RE, FD, logit, probit, etc.). I also like to use machine learning methods (supervised and unsupervised) when working with large datasets.

**Why I work on this:**

My academic journey began with an interest in labor economics, which expanded into innovation economics, economic and financial geography, trade policy, and environmental economics. The intersection of economic policy, technological change, and labor markets continues to be a central focus of my research.

**Apart from economic geography, of course, my main passions in life are:**

Data Science, Novels, Cartoons & Animated Movies, Travel, Gym, Nature, Cultures

Name: W. Nathan Green (Nathan)  
Pronouns: He/him/his  
Position/affiliation: Assistant Professor, Department of Geography, National University of Singapore  
Educational background: PhD in Geography, University of Wisconsin-Madison, USA, 2019  
Place of birth: Texas, USA  
Contact: geowng@nus.edu.sg



**What I work on:**

Nathan studies how development finance transforms environments and people’s lives in Southeast Asia, and how people in turn contest these processes. Through this work, he has further developed geographic and interdisciplinary scholarship on agrarian finance, which seeks to explain how changes in agrarian political economy, environment, and social life are driven by processes of financialization.

**How I work:**

Nathan draws on critical ethnography to study the contested and multi-scalar processes of financialization and agrarian change within Southeast Asia. He is also committed to collaborative and social-justice oriented research.

**Why I work on this:**

Nathan has lived and worked in Southeast Asia for much of his adult life. He is broadly interested in promoting social-environmental justice for marginalized groups who have historically been the target of so-called “development” interventions.

**Apart from economic geography, of course, my main passions in life are:**

Scuba diving, birding, traveling, and camping with my family.

Name: Nethmi Bathige  
Pronouns: She/her/hers  
Position/affiliation: PhD Student, Pennsylvania State University  
Educational background: MA, University of Kentucky, 2022  
Place of birth: Colombo, Sri Lanka  
Contact: njb5958@psu.edu



**What I work on:**

Feminist political ecology, critical agrarian studies, agrarian financial geographies, climate adaptation, sustainable climate finance

**How I work:**

Qualitative interviews, mental maps, mixed methods (qualitative + quantitative)

**Why I work on this:**

I did research on a climate adaptation project during my MA which led me to questions on climate finance and agrarian credit and debt. So, I wanted to bring together the sub-fields of political ecology and financial geography to study the embodied outcomes of agrarian credit and debt programs.

**Apart from financial geography, of course, my main passions in life are:**

Movies, travelling, photography, baking

Name: Paweł Węgrzyn  
Pronouns: He/him/his  
Position/affiliation: Assistant Professor,  
Department of Economic  
Geography  
SGH Warsaw School of Economics  
Educational background: PhD in Economics and Finance,  
SGH Warsaw School of  
Economics, 2020  
Place of birth: Szprotawa, Poland  
Contact: pwegrz@sgh.waw.pl



**What I work on:**

I focus on financial systems, particularly on the development and stability of financial markets. My research emphasizes the spatial dimensions of financial markets and institutions.

**How I work:**

I primarily employ base quantitative methods, occasionally complemented by qualitative approaches.

**Why I work on this:**

Prior to earning my doctorate, I focused on the functioning of financial markets and corporate finance. My academic journey at SGH Warsaw School of Economics ignited my passion for economic geography, leading me to explore the fusion of finance and geography—a combination that continues to inspire and motivate my work.

**Apart from financial geography, of course, my main passions in life are:**

Chess, books (popular science).

Name: Saira Ahmed  
Pronouns: -  
Position/affiliation: PhD-Candidate (Goethe-University), Research Assistant (University of Mannheim)  
Educational background: M.A. Sociology of Economy and Finance, 2018 (Goethe-University)  
Place of birth: Groß-Gerau, Germany  
Contact: saira.ahmed@uni-mannheim.de



**What I work on:**

My focus lies on heterodox economics, especially on financialization and different topics of political economy. Currently, I am working on the financialization (of the oil market) and the causal explanations of the Great Recession. For this, I am also laying my focus on parts of economic history, such as the evolution of liberalization of financial markets.

**How I work:**

Using quantitative, qualitative, and mixed methods, with visualization techniques using Coleman's bathtub as a model of social science explanation.

**Why I work on this:**

I have a deep interest in understanding the mechanisms of the Great Recession from different perspectives, which led me to study the sociology of economy and finance. My studies paved the way to take a critical look at the causes of the Great Recession by realizing there had been a third oil price shock in 2008, which has not been sufficiently considered scientifically.

**Apart from financial geography, of course, my main passions in life are:**

swimming, cycling, travel, reading non-scientific books, trying out healthy recipes

## FinGeo School; Singapore 2025

## Participant profiles

Name: Shaun Lin  
Pronouns: He/him/his  
Position/affiliation: Lecturer, NUS College, National University of Singapore  
Educational background: PhD, University of Wollongong, 2016  
Place of birth: Singapore  
Contact: shaunlin@nus.edu.sg



### **What I work on:**

Diverse topics in political geography. Empirically, largely in Southeast Asia. I'm also interested in geography pedagogy and interdisciplinary learning and teaching

### **How I work:**

In the field. Qualitative. Participant observation

### **Why I work on this:**

My love for geography and (Southeast) Asia

### **Apart from economic geography, of course, my main passions in life are:**

Liverpool FC, and eating good food with family and close friends.

Name: Silvia Grandi  
Pronouns: She/her/her  
Position/affiliation: Adj. Professor of Geography of Environment and Sustainable Development & of Geopolitics and Finance for International Cooperation, University of Bologna (Italy)  
Educational background: PhD, University of Bologna, 2004  
Place of birth: Faience, Italy  
Contact: s.grandi@unibo.it



**What I work on:**

On political and economic geography and sustainable development. My main interest in financial geography is sustainable finance, development finance, public finance and their policies. I am active on collaborative projects on innovation and regional economy, biodiversity, energy and circular economy, tourism studies and AI. I serve as director in the Italian Public Administration with some interesting experience in international multilateral organisations.

**How I work:**

Using quantitative, qualitative, visual and eclectic methods, with a good degree of mapping and visualisation if appropriate and possible. I love thinking of forecasting and conceptual models, but also applying knowledge in creating policy strategies and their implementations.

**Why I work on this:**

Geography is the discipline that best integrates diverse subjects, offering a comprehensive and transdisciplinary understanding of the world's complexity. It provides the essential knowledge for effective policymaking to benefit both people and the planet—and, of course, because the FinGeo network is great fun!

**Apart from political and economic geography, of course, my main passions in life are:**

Natural science, history, chemistry and physics, photography, music, travel



## FinGeo School; Singapore 2025

## Participant profiles

Name: Swisa Pongpech  
Pronouns: she/her  
Position/affiliation: DPhil Candidate,  
University of Oxford  
Educational background: Current DPhil Student  
Place of birth: Geneva, Switzerland  
Contact: swisa.pongpech@ouce.ox.ac.uk



### **What I work on:**

I work in financial geography and economic geography related to sustainable finance.

### **How I work:**

Currently using qualitative methods and exploring the use of mixed-methods in research.

### **Why I work on this:**

My work experience coupled with my international background and studies in economics, political science and finance have led me to economic geography and now financial geography.

### **Apart from financial geography, of course, my main passions in life are:**

sustainability, documentaries, art, travel

Name: Tomas Nougues  
Pronouns: He/him/his  
Position/affiliation: Postdoctoral fellow, Universidad Nacional de San Martín  
Educational background: Ph.D, Universidad Nacional de San Martín, 2021  
Place of birth: Buenos Aires, Argentina  
Contact: tominougues@gmail.com



**What I work on:**

I cover a wide range of topics within economic sociology and political economy. My main focus is on the linkages between public policy, financial markets, and households in the Global South. Additionally, I work on sociological theory and Latin American social movements.

**How I work:**

Using mainly a qualitative approach with mixed methods, combining in-depth interviews, document analysis, and statistical data.

**Why I work on this:**

I have always been stunned by the ubiquity of debt in our societies. My work focuses on understanding how financial instruments are used to bridge the welfare gap, while exploring the consequences of financial debt for welfare states and citizens in the Global South.

**Apart from financial geography, of course, my main passions in life are:**

Music, literature, nature, and politics.

Name: Tra My Tran (Amy)  
Pronouns: She/her/hers  
Position/affiliation: PhD Researcher, Anglia Ruskin University  
Educational background: PhD Student, Anglia Ruskin University, UK  
Place of birth: Hanoi, Vietnam  
Contact: TT520@pgr.aru.ac.uk



**What I work on:**

Exploring how technology-enabled financial fraud disrupts financial inclusion and impacts vulnerable communities.

**How I work:**

Using quantitative, qualitative, and mixed methods.

**Why I work on this:**

I've always been fascinated by how finance shapes lives—both as a tool for opportunity and exploitation. As technology advances, so do fraud tactics, often targeting the most vulnerable. That's why I use research to uncover risks, protect users, and push for a more just, inclusive financial system.

**Apart from financial geography, my main passions in life are:**

Books and travel!

Name: Ulysses Pascal  
Pronouns: He/him/his/Them/Them/Their  
Position/affiliation: Post Doctoral Researcher, Vrije  
Universiteit Brussel  
Educational background: PhD, University of California Los  
Angeles, 2024  
Place of birth: Los Angeles, California  
Contact: Ulysses.Pascal@VUB.be



**What I work on:**

The international political economy and geopolitics of information infrastructure, with a special focus on financial information infrastructure and the history of computer automation.

**How I work:**

I employ qualitative and quantitative document analysis using mixed methods including discourse analysis, media archeology, natural language processing (NLP), and mapping.

**Why I work on this:**

I became interested in the topic of financial information infrastructure and automation when I first learned about high frequency trading (HFT) and the use of private fiber optic cables to connect markets. My interest deepened when I traveled along the route of an HFT cable between Chicago and New York and became aware of the economic disparity between the nodes and edges of the network. I was drawn to financial geography to understand how these dynamics between finance, infrastructure, labor, and automation operate on a global scale.

**Apart from economic geography, of course, my main passions in life are:**

Economic history, computer history, computer programming, climbing, hiking

Name: Yifan Qi  
Pronouns: He/him/his  
Position/affiliation: PhD Candidate in Accounting and Finance, University of Edinburgh  
Educational background: MScR, MSc University of Edinburgh, 2023, 2021  
Place of birth: Nanchang, China  
Contact: Y.Qi-18@sms.ed.ac.uk



**What I work on:**

I specialize in the accounting, financial, and economic empirical analysis of environmental geospatial data. My research focuses on topics such as pollution, biodiversity, circular economy, and climate change.

**How I work:**

I primarily handle quantitative data, focusing on firm-level data, and conduct quantitative analysis using econometric paradigms. Additionally, I incorporate data visualization to enhance the presentation of my findings.

**Why I work on this:**

I approach financial metrics from the bottom up through accounting, while also understanding the full spectrum of economic phenomena from the top down through political economy. Geospatial data is indispensable and currently my primary focus. I use geospatial data to translate insights to the firm level.

**Apart from financial geography, of course, my main passions in life are:**

video game, play AI, sci-fiction movies and documentaries, swimming, tennis, hiking, horse riding.

Name: Yustina Octifanny (Fanny)  
Pronouns: She/Her/Hers  
Position/affiliation: PhD Research Scholars at  
Department of Geography NUS  
Educational background: Doctoral - Department of  
Geography, National University of  
Singapore (2023-2027)  
Place of birth: Pontianak, Indonesia  
Contact: yustina.octifanny@u.nus.edu



**What I work on:**

I explore various topics in political ecology and urban, regional, and international development issues, adopting cross-cutting approaches to address these themes. For my PhD study, I focus on the implications of voluntary carbon market data at different scales: global, Southeast Asia, Indonesia, and local villages.

**How I work:**

I am a mixed-methods researcher, adapting my approach based on the research topic, goals, and scope. I employ a variety of methods, including quantitative, qualitative, documentary analysis, and spatial analysis, depending on the study. For quantitative research, I use statistical regression or interactive data visualizations when appropriate and feasible. I work with both large datasets and village/household-level survey data. In qualitative research, I am a trained ethnographer and skilled in conducting in-depth interviews. In spatial analysis, I focus on land use and land cover change, and I have also facilitated participatory mapping in collaboration with the local communities.

**Why I work on this:**

My scholarly journey began with an exploration of regional disparities in Indonesia, particularly between Java and the Outer Islands (Non-Java Islands), focusing on issues of development, poverty, and inequality. Through this, I discovered that impoverishment, poverty, and inequality are systematically produced, rather than being a result of certain regions, ethnicities, or groups simply being 'fortunate' to live in the 'right' place. These realizations led me to study various interconnected topics, such as urbanization, regional economies, environmental resource extraction, and new systems designed to produce wealth through the dispossession of marginalized communities. Since then, I have been deeply interested in understanding these emerging systems—such as the bioeconomy of plantations and aquaculture or the carbon market—and their role in perpetuating poverty and inequality.

**Apart from financial geography, of course, my main passions in life are:**

Consulting (research, monitoring and evaluation, and organization strategy design), project management, learning new skills, visit national parks, and wildlife photography.