



RESEARCH MENTORSHIP PROGRAMME

SELECTION OF PROJECTS FROM OUR 2023/24 RMP

ALL PROJECTS RUNNING FOR THE 2023/24 ACADEMIC YEAR AND ARE OPEN FOR APPLICATIONS

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Architecture

Exploring Urban Interiority: Understanding embodied movement and multi-scale in urban studies

Linh Phamvu (she/her)

Bartlett School of Architecture

PhD Architecture Space and Computation



🕒 12 weeks

👤 6 mentees

ABOUT THE MENTOR

I have a diverse educational background: Interior Design (BA), Interior Architecture (MA) and Urban studies (PhD). I also accumulated over seven years of experience as a design team leader for luxury hospitality projects in South East Asia. My interest is about intangible urban heritage, collective memory and urban morphology. My PhD explores the interplay between collective memory and urban morphology, investigating how everyday experiences influence and shape a city's structure. I employ a spatial analysis method (Space Syntax theories and methodologies) to examine this relationship, with a specific emphasis on the city's alleyway network in Asian context.

THE MENTORSHIP

This project seeks to enhance critical and creative thinking in built environment research through an interdisciplinary approach, bridging social sciences and architectural design. The mentorship project offers guidance in exploring: (1) "embodiment" and "embodied movement" in the built environment, (2) multi-scale concepts in urban studies and design, and (3) the idea of urban interiority as a novel frontier in built environment research. The program includes concise lectures, group discussions, and a concluding presentation.

MENTEE REQUIREMENTS

- Welcome students from different backgrounds from social sciences to architectural design
- Having a strong conceptual and critical thinking
- Be responsible and active in self-learning and team work
- Be passionate about cultures, user experience and spatial design"

RESPONSIBILITIES OF MENTEES

- Commit to all of the activities in the programme (reading, lectures, group discussion, presentation)
- Be active and on time

WHAT WILL MENTEES GAIN?

This project will foster your critical and creative thinking in research, hone research skills encompassing idea generation, proposal writing, and literature review. It will also expand your interdisciplinary perspectives and cultivate interpersonal skills through group activities.


Economics

Minimum wage in Italy and the EU: demystifying the long-term effects of minimum wage law on workers' salaries

Samy Moschella (he/him)

Department of Economics
MSc Economics

 10 weeks

 4 mentees



ABOUT THE MENTOR

I am a Master's student in Economics interested in pursuing research at the intersection of Applied Economics and Econometrics. Prior to this, I graduated from King's College London in BSc (Hons) Philosophy, Politics and Economics with a major in Economics and Applied Econometrics. Thanks to my research assistantship in political justice in my first year as an undergraduate I came to appreciate the influence of studies on people's (civic) behavior. This encouraged me to pursue meaningful and cross-cutting research in migration economics in my second year alongside another known professor at KCL. Ultimately, my subsequent experience working in the civil service, pursuing my Master's degree, and this research mentorship will all further my efforts in positively shaping the world through powerful research.

THE PROJECT

This project aims to test the veracity of recent political assertions about the negative long-term effects of minimum wage on future workers' wages. To do so, a literature review on the topic of minimum wage must be conducted. Further, a panel data set will be compiled and cleaned using publicly available statistics about EU countries' wage rate and wage growth. This will be important as a difference-in-differences analysis will be run on the data to test the empirical evidence against the available literature. Ultimately, if time allows it, the results will be written up. At the start of the mentorship some data and literature will be provided to begin the discussion and encourage further research. In addition, throughout the experience mentees will be taught how to perform advanced statistical analyses and face the challenges of doing research if need be via concise seminars. Ultimately, I hope to contribute to the literature by providing evidence as to whether minimum wage legislation ultimately hurts workers' wages or not.

MENTEE REQUIREMENTS

Essential requirements are: intermediate data analysis skills (preferably in Stata, although not a requirement); knowledge of introductory economics/microeconomics; comfortable reading 5 papers a week and/or conducting data analysis tasks or presentations. Furthermore, the following characteristics are considered a plus, not a requirement: knowledge of Italian: some experience with modelling (whether mathematical, economic, econometrics, or in a related subject) or quasi-experimental research methods (ex. Difference-in Differences etc.); any knowledge of university-level mathematics or statistics.

RESPONSIBILITIES OF MENTEES

Conducting literature reviews. Collecting and cleaning data using a statistical package. Running regressions and quasi-experimental methods on a data set. Brainstorming, discussing and presenting your topic with your peers to encourage cross-cutting research. Lastly, writing up your findings.

WHAT WILL MENTEES GAIN?

This mentorship will equip you with great examples of conducting work independently and to a high standard, using classical and quasi-experimental research methods on a data set you compiled, and willingness to learn new skills and knowledge in topical and current policy development areas that are fundamental to showcasing interest and experience in the fields of research, policy/user evaluation and statistical analysis – which are in high demand in academia/further study and the public and private sectors.


Healthcare


Challenges and Opportunities of Large Language Model Applications Towards Diabete Care

Hengrui Zhang (he/him)

Institute of Health Informatics

PhD in Health Informatics

 10 weeks

 4 mentees



ABOUT THE MENTOR

I am a first year PhD student at the Institute of Health Informatics. I obtained my undergraduate degree in Computer Science at University of Warwick and an MSc in Health Data Science at UCL. I am currently interested in interdisciplinary applied research in the self-management of people with diabetes.

My PhD research focuses on developing machine learning algorithmic frameworks with personalization and privacy-preserving capabilities, and I am also interested in translating the results of my research into practical products that can benefit more people in real life.

THE PROJECT

The primary focus of this mentorship project is to analyse the current status and potential of large language models (LLMs), as well as other machine learning models, for diabetes care in the form of a literature review. Personalised machine learning algorithms for diabete care have been the subject of much research and have attracted significant investment in the past few years, yet real world progression still needs time.

This mentoring project hopes to provide insights for other researchers and entrepreneurs to help reduce the research-to-application gap by providing a literature review of the history of technology development in the field and analysing the current challenges and opportunities that may exist from an interdisciplinary perspective.

MENTEE REQUIREMENTS

Anyone interested and eager to learn is welcome!

Good time management skills.

Background in Psychology, Food Science, Computer Science or any related field is a plus.

RESPONSIBILITIES OF MENTEES

- Attending meetings and completing training tasks;
- Maintaining good communication with the mentor and other mentees and actively participating in discussions;
- Preparing a joint literature review by conducting complex database searches of relevant articles, literature, books and papers together with other mentees.

WHAT WILL MENTEES GAIN?

- Acquire a ready-to-use framework for understanding a field and preparing a literature review
- Learn and practise essential research skills in transdisciplinary research
- Gain insight on various hot topics in both academia and industry, such as the applications of Large Language Models in different domains. Mentees will have the chance to talk with professionals from both academia and industry about their work in the project. This chance would highly depend on how the project goes.


Law


The Role of Domestic Courts in Consociational Systems of Power-Sharing

Sophia Schroeder (she/her)

Faculty of Laws

PhD in Laws

 8 weeks

 4-5 mentees



ABOUT THE MENTOR

I'm a PhD student with a strong background in constitutional law and conflict resolution. I hold degrees from the UK, France and Germany and lived for extensive periods in the Middle East. My passion is to share knowledge and give students the right tools to pursue their research interests. My research explores the role of domestic courts in consociational systems of power-sharing and involves data collection through interviewing in Northern Ireland and Lebanon. I seek to understand how courts react to consociations and the implications of their judgments for the broader political set-up.

THE PROJECT

During the first weeks, we will gain knowledge of consociationalism (with a focus on Northern Ireland and Lebanon) and judicial politics. We will also discuss different qualitative research methods (case law analysis, comparative research in constitutional studies, and more importantly, interviewing elites). Later on, I will encourage you to independently find relevant literature, court decisions and other sources. We will embark on case law analysis to identify how courts resolve political conflicts between the different communities and deal with human rights-based claims. In addition, we will deal in depth with interviewing as a method. Meetings will take a seminar-style approach with discussions around key literature, case law and interview narratives.

MENTEE REQUIREMENTS

Interest in the topic and commitment to the project are the most important requirements. Students of law and social and political studies are welcome to apply. Knowledge of French and/or Arabic is a plus. Understanding of public law and/or human rights law is also a plus.

RESPONSIBILITIES OF MENTEES

You will be expected to complete the readings prior to the meetings and proactively engage in our discussions. Data collection, transcribing 1-2 interviews and preliminary analysis will also require some independent work (but don't worry, we will talk everything through, and you can always ask for clarification!). The workload will be around 3-4 hours/week.

WHAT WILL MENTEES GAIN?

You will get an insight into interdisciplinary research approaches, in particular socio-legal studies. You will learn new research skills and the project will also be a good preparation for your dissertation (I will provide additional support where appropriate).

Law and Cybersecurity


Investigating the Security Policies and Practices of Financial Institutions


Marilyne Ordekian (she/her)

Department of Computer Science

PhD in Cybersecurity



 8 weeks

 2 mentees

ABOUT THE MENTOR

I am a third year PhD candidate at the Centre for Doctoral Training in Cybersecurity within the Computer Science Department. I have a background in law with extensive experience as a practicing lawyer. My research interests are primarily focused on the exciting fields of tech law, cybersecurity, financial crime, and cryptocurrencies.

My research bridges the gap between law, computer science, and crime science. I conduct interdisciplinary work that investigates cryptocurrencies and financial institutions from legal and security perspectives. Specifically, I examine both of their legal and security practices, policies, and compliance.

THE PROJECT

The project examines the terms and conditions of specific financial institutions like banks, and it is part of an already existing larger project. The project will investigate specific contractual terms related to customer obligations and security advice provided by these institutions. Overall, this is an examination of certain policies and practices of financial institutions.

The role of the mentees will be to fulfill a puzzle piece from a much bigger project that has been conducted for over a year. The project has already yielded a paper and the tasks that the mentees will perform will be included in the second paper. The mentees will be instructed to read sections of the terms and conditions and extract specific information onto a sheet. I will provide the mentees with a detailed codebook and thorough instructions on how and what to code into the sheet. There will be weekly meetings to check progress, and I will also guide mentees and assist them with any difficulties they may face.

MENTEE REQUIREMENTS

The mentees should be organised to meet deadlines, have a willingness to read, and possess basic proficiency in Excel. It is highly desirable if the student has a background in law or any policy or social sciences field, or is comfortable with general qualitative research skills.

RESPONSIBILITIES OF MENTEES

The primary responsibility of mentees will include reading and extracting information from terms and conditions. This will be performed following an existing codebook and specific instructions. The extracted information will be organised into a predetermined and categorised Excel sheet. I will provide you with examples and teach you how to do this, as I will be coding alongside you during this time.

WHAT WILL MENTEES GAIN?

The mentees will acquire highly valuable and sought-after research skills in qualitative and legal research methods. They will develop understanding in content analysis, thematic analysis, and legal analysis. By contributing to a larger research project, the mentees will also enhance their understanding of research, collaboration, and the exciting world of interdisciplinary work. In working on this project, they will be exposed to the emerging field of law and cybersecurity. Overall, this project will furnish the mentees with a strong foundation in qualitative research methods, which will prove invaluable in launching their research aspirations.


Public Health

Cost-benefit analysis of cancer screening strategies

Angela Liu (she/her)

Department of Applied Health Research
MPhil/PhD Applied Health Research



 6 weeks

 3 mentees

ABOUT THE MENTOR

My name is Anqi Liu (Angela) and I am a PhD student in the Department of Applied Health Research at the UCL. I have an education in applied economics and health economics evaluation. Specifically, my area of expertise and current projects are on the cost-effectiveness of early breast cancer screening in China.

My research project focuses on evaluating the cost-effectiveness of different pathways of breast cancer screening in China. This project will use decision analytical modeling, economic evaluation and the most up-to-date evidence for breast cancer screening to determine the most cost-effective pathway and age-based frequency of breast cancer screening in China.

THE PROJECT

The project aims to explore the benefits of cancer screening. We highlight the major ethical considerations surrounding clinical data, explore the barriers to current cancer screening evaluation efforts, and offer potential solutions to overcome these challenges. Participants will have the opportunity to develop skills such as data collection and processing, critical thinking, and presentation.

MENTEE REQUIREMENTS

Interested in cost-effectiveness analysis and proficiency in statistical software. Meanwhile, given my educational background, I focus on the analysis of cancer screening programme in low - and middle-income countries. Thus, I hope that mentees will ideally have some knowledge of healthcare in LMICs.

RESPONSIBILITIES OF MENTEES

We plan to start by reviewing the existing literature on cancer screening programmes. We then identify a cancer screening technology for the cost-benefit analysis. If the benefits of this technology outweigh the costs, we will further discuss the feasibility of its nationwide expansion. Eventually, we will present our research results in poster form.

WHAT WILL MENTEES GAIN?

Obtain an overview of cost-effectiveness analysis for developing policymaker competencies; improve comparative study skills and broaden international visions based on your own contextual backgrounds; develop basic research skills in literature reading and review, document analysis, independent and critical thinking, communication, and collaboration.


Public Health


Exploring the links between climate change and HIV incidence and severity: a systematic review

Matylda Buczkowska (she/her)

Institute for Global Health

PhD in Biosocial Epidemiology

 12 weeks

 2-4 mentees



ABOUT THE MENTOR

I am a second year PhD student interested in researching social inequalities, particularly in the context of environment, infections and nutrition. I previously completed a BSc in Nutrition at UCL and MSc in Epidemiology at Imperial as well as worked in the GI surveillance team for the UK Health Security Agency. My 3-year project focuses on understanding the complex framework and associations between climate change and HIV incidence and severity in sub-Saharan Africa. I am also hoping to establish whether vulnerable groups, such as children and socioeconomically deprived individuals, are more affected by the two phenomena.

THE PROJECT

Climate change and health is a novel field which aims to understand how environmental changes affect health outcomes. Climate change has been already linked to several infectious diseases, such as vector-borne and water-borne diseases, but the links with sexually transmitted diseases are less straightforward and have not been researched a lot yet. In this project, I hope to find common themes linking climate change and HIV (such as food insecurity and migration) and summarise them systematically. This will help me out with future steps of the PhD, when I will be quantitatively analysing HIV data.

MENTEE REQUIREMENTS

Interest in environmental sciences, climate change and/or infectious diseases (especially sexually transmitted infections!); basic knowledge of Public Health/Epidemiology; some experience in literature search and familiarity with main scientific databases

RESPONSIBILITIES OF MENTEES

Helping out with: defining inclusion and exclusion criteria for the literature search, study search and selection, data extraction

WHAT WILL MENTEES GAIN?

Mentees will gain insight into an emerging field of environment and health. They will have a chance to discuss and understand two of the biggest humanity threats of the 21st century: climate change and HIV. I hope to publish the systematic review and mentees would be included as paper authors!

Science and Public Policy

Science diplomacy practices: The place of scientists and diplomats

Itegbeyogene Ezekiel

Department of Science, Technology, Engineering and Public Policy

PhD Public Policy



🕒 6 weeks

👤 6 mentees

ABOUT THE MENTOR

I hold a PhD degree in material Physics and am currently in my 2nd year of a PhD programme at the Department of Science, Technology, Engineering, and Public Policy (STeAPP). Prior to joining STeAPP, I worked for over 10 years as a science, technology, and innovation (STI) policy researcher. My current PhD research focuses on how non-state actors such as the scientific diasporas can contribute their expertise towards the development of STI in their home country. I examine this through the lens of Science Diplomacy in relation to the role of foreign missions.

THE PROJECT

Science Diplomacy (SD) in simple terms involves using scientific knowledge and collaborations to tackle challenges at the national, regional, and global levels. This project's aim is to help mentees grasp the conceptual and practical aspects of SD. It will delve into the key stakeholders and strategies various countries adopt to incorporate SD into their foreign policies. The meeting will include role-play exercises to teach valuable SD skills and simulate practical experience. Mentees will also have the opportunity to collaboratively develop an SD concept of interest and transform it into an academic article with the potential for future publication.

MENTEE REQUIREMENTS

Students with backgrounds in natural sciences, engineering, social sciences, and international relations are most welcome. If you have an interest in working as a scientist diplomat, diplomat scientist or seeing results from the lab provide some evidence for informed STI policy, this short course will provide some background. Just come ready with some literature review and publishing interest.

RESPONSIBILITIES OF MENTEES

Mentees are expected to take part in some role play, engage in literature review and data collection. Data analysis will be required but students should not feel burdened with this.

WHAT WILL MENTEES GAIN?

This short course will give an opportunity for the mentees to learn about an emerging academic field that tries to merge science with diplomatic practices. It will also sharpen the policy negotiation skills of the mentees and strengthen their qualitative research abilities.

Sociolinguistics

On the Way to be Global Citizens: Exploring Distributed Agency and Transnational Identity in Chinese Diasporic Families

Delia (Xiruo) Tang (she/her)

IOE – Culture, Curriculum and Social Media

PhD in Sociolinguistics and Intercultural Communication

🕒 8 weeks

👤 4 mentees



ABOUT THE MENTOR

I am currently undertaking my joint PhD program at Fudan University and UCL. My research interest is in transnational families' multilingual education and intergenerational communication. I hope my study can help more multilingual families to solve their problems and achieve their goals. My life-long goal is to be a researcher, a practitioner, and a storyteller. I am eager to pursue the truth and make more contributions to our global society. I've published journal articles in the International Multilingual Research Journal, and my paper has been accepted by international conferences, including AAAL, AILA.

THE PROJECT

My research is a sociolinguistic ethnography project on Chinese transnational families' language planning, intergenerational connections, heritage language maintenance, and their awareness of identity. It has lasted for two years and 18 families with 20 adolescents are included. Video recordings, fieldnotes, and interviews were collected for analyzing these families' linguistic behaviors and socio-cultural interactions.

Aims: analyze interactive data within my PhD project (e.g. family talks) to investigate how parents and adolescents co-construct cultural beliefs in their bilingual intergenerational talks about some interesting debate topics. Mentees are very welcome to conceptualize their research ideas from my data during our reading sessions.

MENTEE REQUIREMENTS

- Have an interest in intercultural communication, different cultures and languages
- Some experience in literature search and familiarity with scientific databases
- Have bilingual/multilingual background or have been to different countries
- Be responsible and active

RESPONSIBILITIES OF MENTEES

- Commit to all of the activities in the program (reading, group discussion, presentation)
- Conduct literature review in relevant fields
- Learn the transcription system within conversation analysis
- Analyze interview and interactive data through Nvivo 12 and Transana
- Be active and on time

WHAT WILL MENTEES GAIN?

- Research skills (e.g. coding, qualitative data analysis, literature review) that are transferable to any area of research.
- Understand how to use conversation analysis to deal with interactive linguistic data through Transana (a software)
- They will engage in discussions where they can learn about the trending topics in sociolinguistics (e.g. translanguaging, interculturality and transnational identity)
- Possibility to write a journal/conference article for publication :D