PhD Fellowships in Responsible AI, AI-Human Coexistence and AI for Sustainability at Sussex and Monash Universities

About the Projects

Unleashing Potential: Harnessing AI for Fairness, Transparency, and Inclusive Growth in Financial Services

This project explores the intersection of artificial intelligence (AI) and financial inclusion, focusing on marginalized populations. By exploring innovative AI-based solutions, this research aims to bridge the gap and provide equitable access to financial services for underprivileged communities. This project examines the impact of digital discrimination and seeks to develop AI frameworks that minimize bias, promote transparency, and increase trust in the financial sector. To strike a delicate balance between diversity, equity, and inclusion while considering corporate risk mitigation, this study aims to uncover strategies that align societal benefits with prudent risk management. (*We expect potential candidates to have an academic or professional background in computer science, mathematics, statistics, econometrics, or related disciplines)*

Building Bridges: Safeguarding Ethical and Legal Boundaries in the Human-AI Coexistence Era

This project delves into the critical area of responsible AI and seeks to explore the ethical, legal, and social implications of integrating AI into various aspects of our lives. This research aims to mitigate potential biases, privacy concerns, and societal impacts by exploring frameworks for responsible AI development. By exploring the dynamics of human-AI coexistence in multiple domains (education, finance, healthcare, and legal) this project seeks to develop policies and strategies to foster a harmonious relationship between humans and AI, where technology complements, enhances, and empowers human capabilities while upholding fundamental values and ensuring equitable outcomes. *(We expect potential candidates to have an academic or professional background in Law, Information Systems, or Computer Science)*

From Field to Consumer: Leveraging AI to Enhance Sustainability and Efficiency in Supply Chain Networks

This project explores the incredible potential of AI to revolutionize industries and foster a more sustainable supply chain. By harnessing causal machine learning algorithms and Big Data analytics, our research aims to develop innovative AI-powered solutions that optimize resource management, minimize environmental impact, and enhance productivity across supply chains. By integrating cutting-edge technologies with existing business practices, we aim to create a future where AI empowers industries to improve product quality, reduce waste, and ensure a sustainable and resilient supply chain for future generations. *(We expect potential candidates to have an academic or professional background in Computer Science, Mathematics, Statistics, Econometrics, Industrial Engineering, or any related disciplines)*

You can choose one of the above topics. However, we are also open to all related areas around AI and machine learning modelling and applications, digital technology strategy, and sustainability. The project is primarily co-supervised by Professor Novi Quadrianto (University of Sussex - lead supervisor) and A/Professor Arif Perdana (Monash University - co-supervisor). An additional co-supervisor from the University of Sussex may be required depending on relevant expertise. Please discuss applications informally with them directly via email before applying.

Notes on funding

The PhD student will receive a tax-free stipend of £18,622 per year for 4 years (based on the UK Research and Innovation rate). In addition, the student will receive a stipend to support research training of £2,000 for 4 years and your tuition fees will be waived up to the overseas rate for 4 years. This funding is available to UK, EU and international students.

Working Environment

The PhD students will be working at The University of Sussex (http://www.sussex.ac.uk), UK. It is a leading, research-intensive university founded in 1961. Specifically, the students will work in the WeArePAL lab (https://wearepal.ai/) in the School of Computer Science was co-founded in 2017 by Novi Quadrianto and Jeremy Reffin. The PhD students will also have the opportunity to visit and work at Monash University, Indonesia campus for particular period depending on their availability as well as if they need to collect data from Indonesia. Monash University, Indonesia brings 60 years of globally-leading and world-changing research and teaching excellence to the heart of Indonesia.

Living environment

The city of Brighton & Hove has it all - sun, sea, great clubs, great restaurants, fabulous stores, a truly cosmopolitan atmosphere and is only 50 minutes from central London. Brighton is right on the beach (only 30 minutes by bike from the University) and offers beautiful views of the sea and beaches, boat trips, sports and beach activities. The South Downs offer breathtaking views, peaceful walks and many opportunities for mountain biking, hiking or picnicking

How to apply

Apply online for a full-time PhD in Computer Science using our step-by-step guide (http://www.sussex.ac.uk/study/phd/apply). You can also find details about our admission requirements here. Please clearly indicate on your application form that you are applying for the PhD fellowship under the supervision of Professor Novi Quadrianto.

Contact us

Please contact Professor Novi Quadrianto (https://profiles.sussex.ac.uk/p335583-novi-quadrianto) or A/Prof Arif Perdana (https://research.monash.edu/en/persons/arif-perdana) for any project-related questions.

Schedule

There is no set deadline for applications, all applications will be considered until positions are filled. Start dates are February, May, September 2024, but later dates may be considered.