Abhimanyu Pallavi Sudhir

AI researcher working on program markets in the context of AI and bounded rationality.

Education

- University of Warwick · PhD Computer Science · 2022-26 – supervisor: Long-Tran-Thanh
- Imperial College London · MSci Mathematics · 2018-22 – 1st class honors

Internships

- Goldman Sachs · AI Research Intern · Jan-Aug 2021

Publications

- Abhimanyu Pallavi Sudhir and Long-Tran Thanh (2024), "Betting on what is neither verifiable nor falsifiable", arxiv.org/abs/2402.14021
- Abhimanyu Pallavi Sudhir (2021), "A mathematical definition of property rights in a Debreu economy", arxiv.org/abs/2107.09651

Archived pure math work: see Google Scholar or extended CV.

Ongoing collaborations

- *Consistency checks for forecasting* with Daniel Paleka et al (2024) · Berkeley Supervised Program for Alignment Research (SPAR)

Academic service

- *Teaching Assistant for CS141: Functional Programming (Warwick)* · 2023
- *Reviewer for Advances in Applied Clifford Algebras (Springer)* · 2020

Workshops and courses

- *Co-operative AI Foundation* · Jul 2023 · workshop on AI and cooperative game theory

Pet projects

- *The Winding Number* · 2016-2023 · Personal academic blog; sample articles [1] [2] [3] [4]

Write-ups and talks

- *Betting on what is not verifiable nor falsifiable* · 2023 · PhD
  - Annual Report [pdf]
  - Warwick Postgraduate colloquium (Dec 2023) & Warwick Cake Talk (Nov 2023) [ppt]
- *Bounded rationality and such* · 2022-23 · PhD
  - "Algorithmic information is at the root of all our problems", Warwick Postgraduate colloquium (Mar 2023) [ppt]
  - "Incompleteness theorems and firing philosophers", Warwick Cake Talk (Feb 2023) [ppt]
  - PhD proposal [pdf]
- *When does equivariant learning make sense?* · 2021-22 · final-year project with Jeroen Lamb
- *A mathematical definition of property rights* · 2021
  - Imperial Undergraduate Colloquium (Feb 2022)
  - Sheffield SIAM-IMA Applied Math Conference (July 2021) [ppt]
- *Local normal forms of analytical maps near fixed points* · 2020 · group report and presentation
- *Lie theory: the topology of groups* · 2019 · UROP reading project with Richard Thomas
  - Warwick-Imperial Autumn Meeting (Mar 2022) [cancelled due to COVID-19 lockdowns]
  - Imperial Undergraduate Colloquium (Oct 2019) [report] [ppt]
  - Imperial 3-minute thesis competition (Oct 2019)
- *Ultraproducts and hyperreals* · 2018-19 · computerized formal proving with Kevin Buzzard
  - Files in the Lean math library on Github, ≈1500 loc [hyperreal] [ultraproduct] [germ]
  - Formalization of college math exams [announcement post]
  - Poster presentation (Jun 2019) [poster]

Links

- Contact: [abhimanyupallavisudhir@gmail.com] [+44-7771824896]
- Websites: [TheWindingNumber.blogspot.com] [abhimanyu.io]
- Profiles: [StackExchange] [LessWrong] [LinkedIn] [Scholar] [ORCID]