Abhimanyu Pallavi Sudhir

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

Formal

Education

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

Internships

 \bullet Goldman Sachs \cdot AI Research Intern \cdot Jan-Aug 2021

Research

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)

Projects

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)
- \bullet Ultraproducts and hyperreals \cdot 2018-19 \cdot 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: [email] [phone]
- Websites: [TheWindingNumber.blogspot] [Homepage]
- Profiles: [StackExchange] [LessWrong] [LinkedIn] [Scholar] [ORCID]