

Adrian Goldwaser

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Education

University of Cambridge (2021 - present): Completing a PhD in Engineering supervised by Hong Ge in the Machine Learning Group

- Supported by the Harding Distinguished Postgraduate Scholars Programme

University of New South Wales (2015 - 2018): Completed a BSc in Computer Science Engineering (Honours) majoring in AI

- WAM of 91 (HD), 2nd place in cohort, Dean's Award (2016), Dean's Honours List (2015, 2017)
- National ICT Australia Undergraduate Research Scholarship (Data61 - CSIRO)

Publications

- Adrian Goldwaser and Michael Thielscher. Deep Reinforcement Learning for General Game Playing in *Proceedings of the AAAI Conference on Artificial Intelligence*, 2020
- Adrian Goldwaser and Andreas Schutt. Optimal Torpedo Scheduling in *Journal of Artificial Intelligence Research*, 2018.
- Adrian Goldwaser and Andreas Schutt. Optimal Torpedo Scheduling in *Proceedings of the 23rd International Conference on Principles and Practice of Constraint Programming*, 2017 - named **Best Student Paper**
- Thibaut Feydy, Adrian Goldwaser, Andreas Schutt, Peter J. Stuckey and Kenneth D. Young. Priority Search with MiniZinc in *The Sixteenth International Workshop on Constraint Modelling and Reformulation*, 2017
- Haris Aziz and Adrian Goldwaser. Coalitional Exchange Stable Matchings in Marriage and Roommate Markets in *Proceedings of the Sixteenth International Conference on Autonomous Agents and Multiagent Systems*, 2017 (extended abstract)

Employment

Software Engineer (L4), Google Sydney (2019 - 2021)

- Full time engineer working on public transport routing backends for Google Maps
- Mostly C++, working on backend servers and pipeline development/maintenance including on call rotations for various data ingestion pipelines

Forward Deployed Software Engineer, Palantir Technologies (Summer 2017/2018)

- Full time internship working as part of a small team to customise and implement products and data pipelines for a Government client
- I worked on data integrations and integration infrastructure using Java 8 and Spark
- I also designed and implemented a custom tool for our client using TypeScript and ReactJS which interacted with a wider ecosystem of products

Research Placement, Data61 - CSIRO (Summer 2016/2017)

- Non-convex optimisation research where I looked into scheduling of carts of molten metal inside a steel production plant
- Proved optimality on all online cases of the problem and created a novel new approach to the problem, achieving state-of-the-art results. Used MiniZinc and Gurobi for optimisation, creating a new meta-search strategy within MiniZinc

Research Placement, Data61 - CSIRO (Summer 2015/2016)

- Algorithmic Decision Theory research where I looked into proving complexity bounds on exchange stable matchings

Software Developer, Vesparum Capital (2015 - 2018)

- Casual work as part of a small team of developers to provide reliable software to complement advisory business
- Worked on automating data collection and integration for market data using C# and postgres and on an internal django website

Tutor for UNSW Computer Science Engineering, UNSW (2017 - 2018)

- Ran tutorials and laboratories to teach 1st to 4th year students in a ranges of subjects including Computer Systems Fundamentals, Artificial Intelligence, Neural Networks and Data Structures and Algorithms
- Taught C, assembly, prolog, standard AI techniques, tensorflow and basic complexity analysis

Tutor in Residence, Shalom College (2017 - 2018)

- Provided academic tutoring on a range of STEM subjects
- Provided pastoral care for college residents, including getting Mental Health First Aid and Provide First Aid certifications
- Dealt with emergency situations at college when they arose
- Performed administrative help for college residents

References

Available on request.