JONATHON SCHWARTZ

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EDUCATION

BSc (Hons)	**Computer Science**	2016-2018

University of Queensland
- GPA: 6.79/7.00, **1st Class Honors**.
- Thesis: "Autonomous Penetration Testing using Reinforcement Learning", supervised by Hanna Kurniawati.

BMarSt (Hons)	**Marine Biology and Ecology**	2010-2014

University of Queensland
- GPA: 6.34/7.00, **1st Class Honors**.
- Thesis: "Does control of the heart hold the key to survival in a warming world in a diving ectotherm?", supervised by Craig Franklin.

RESEARCH EXPERIENCE

Research Engineer	Australian National University	2019-present

- Research into autonomous cyber operations,
- developing a high-fidelity cyber research environment, and
- applying planning under uncertainty to cyber operations.

PUBLICATIONS

Jonathon Schwartz, Edwin El-Mahassni, Hanna Kurniawati, "POMDP + Information-Decay: Incorporating Defenders Behaviour in Autonomous Penetration Testing". *Proceedings of the Thirtieth International Conference on Automated Planning and Scheduling (ICAPS)* 2020. Under review.

Essie Rodgers, **Jonathon Schwartz**, Craig Franklin. "Diving in a warming world: the thermal sensitivity and plasticity of diving performance in juvenile estuarine crocodiles (Crocodylus porosus)". *Conservation physiology*, 3(1), 2015.

AWARDS

University Medal	University of Queensland	2018

- Awarded to students who have obtained 1st Class Honours and demonstrated exceptional academic excellence across their studies, **the highest academic prize for undergraduates** across the entire University.

Best Software Project	University of Queensland	2018

- $1000 prize awarded to the best undergraduate thesis or capstone software project across the entire Faculty of Engineering, Architecture and Information Technology.

TEACHING EXPERIENCE

Teaching Assistant	**COMP3600 Algorithms** Australian National University • Ran labs and marked assignments and exams for third year Algorithms course.	2019
Teaching Assistant	**COMP3702 Artificial Intelligence** University of Queensland • Ran labs and marked assignments and exams for third year Artificial Intelligence course.	2018
Tutor	**GEOM1000 Geographic Information** University of Queensland	2011-2012
Tutor	**BIOL1030 Biodiversity & Our Environment** University of Queensland	2011

TECHNICAL SKILLS

Programming	Python, C, C++, Java
Technologies	AWS, VM Management
Machine Learning	TensorFlow

For some examples of my work please see my github: github.com/Jjschwartz.
Unfortunately, most of my recent work has been as part of a defence project so is unavailable.

OTHER RELATED STUDY

Deep Learning Specialization	Coursera, deeplearning.ai • Five courses covering deep learning theory and implementation of common architectures.	2018

OTHER WORK EXPERIENCE

Urban Climb	**Head Coach, Sales Manager, Event Organizer** • Coached children and adults from beginner to national level athletes in rock climbing. • Oversaw climbing equipment sales across four venues. • Organized Australia's largest state and national level climbing events. Involved raising more than $20,000 in sponsorship and coordinating all aspects of events.	2013-2018