

Robert Andrew Martin

<https://reasonabledeviations.science>
martin.robertandrew@gmail.com

EDUCATION

UNIVERSITY OF CAMBRIDGE

PHYSICAL NATURAL SCIENCES

UNDERGRADUATE

October 2018 – Present

SJI-INTERNATIONAL

IBDP – 45/45

IGCSE – 9 A*

2009–2015 | Singapore

SKILLS

LANGUAGES

English – native

Spanish – professional working proficiency

PROGRAMMING

Proficiency

Python (especially NumPy, pandas, sklearn, Flask)

Experience

Java • R • HTML/CSS • JavaScript • SQL

Exposure

C++ • Mathematica • Solidity • Matlab

CERTIFICATIONS

- CT1 Financial Mathematics – Institute and Faculty of Actuaries
- Higher Certificate in Healthcare Support – SkillsFuture SG
- CIAiT Plus International Diploma

ONLINE COURSES

Georgia Tech Machine Learning

MITOCW Multivariable Calculus

Princeton Bitcoin and Cryptocurrency

NYU Stern Valuation class

Quantopian Quantitative Finance

LINKS

Github:// [robertmartin8](#)

LinkedIn:// [robert-a-martin](#)

EXPERIENCE

DUANE MORRIS & SELVAM LLP | BLOCKCHAIN CONSULTANT

Jun 2018 – Present | Singapore

- Consulted on multiple blockchain projects, with an emphasis on technical aspects, tokenomics, and security.

SCI LTD | FULL STACK FINTECH DEVELOPER

Nov 2017 – May 2018 | Remote

- Built a robo-advisor service from first principles using Flask and MySQL.
- Designed and implemented a novel modification of the efficient frontier algorithm, and integrated this with the Interactive Brokers API.
- Developed smart financial screens based on machine learning.
- Conducted rigorous backtests for proprietary investment strategies, along with interactive data visualizations.
- Built a scraper to acquire financial data from US/Japan corporate reports.

SINGAPORE ARMED FORCES | COMBAT MEDIC SPECIALIST

Jul 2016 – May 2018 | Singapore

- Completed the challenging 2-month Medical Response Force Conversion Course, involving continuous high-risk activity in a full-bodied chemical suit and gas mask, with constant emphasis on teamwork and command.
- Selected to become a specialist based on performance under pressure, with leadership roles in multiple joint exercises with the Special Forces.

PROJECTS

MACHINE LEARNING ON STOCKS | PYTHON, R

Feb 2016 – Present

Predicting stock returns by training machine learning classifiers on 15+ years of fundamental financial data that I scraped. An earlier version of this project has been open-sourced on GitHub, but my private branch is still actively developed and is central to my personal live trading system.

PYTHON PORTFOLIO OPTIMIZATION | PYTHON

Jun 2018 – Present

PyPortfolioOpt is an extensively documented and tested portfolio optimisation package which is available on PyPI. In addition to classical techniques, I have implemented modern improvements and some novel experimental features.

ACADEMIC BLOG | HTML/CSS

May 2017 – Present

ReasonableDeviations is my academic blog built using Jekyll and custom CSS/HTML. Includes revision notes for various courses and textbooks, as well as summaries of journal articles.

AWARDS

- 2018 SJI-Foundation Christ's College Cambridge merit-based scholarship
- 2015 SJII Academic Award for the top academic student in the cohort
- 2015 SJII Subject Awards: Physics, Mathematics, European Languages
- 2015 National Youth Achievement Award – Gold
- 2014 Merit-based scholarship for the IBDP at SJII