

# Ashley Vicary

+61 420 330 970 | [avicary@alum.mit.edu](mailto:avicary@alum.mit.edu) | [linkedin.com/in/ashleyvicary](https://www.linkedin.com/in/ashleyvicary)

## EDUCATION

### MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Cambridge, MA

*Master of Applied Science in Data, Economics, and Development Policy*

2021

- GPA: 5.00 / 5.00
- Courses: Advanced Development Economics, Political Economy, Econometric Data Science, Modern Chinese History
- Scholarship: one of six recipients of the Reserve Bank of Australia's prestigious post-graduate full-ride scholarship

### UNIVERSITY OF WOLLONGONG

Wollongong, Australia

*Bachelor of Economics & Finance (Double major: Quantitative Economics & Finance; Minor: International Studies)* 2013 – 2015

- Weighted Average Mark: 90 / 100 (top 5% of students); Faculty of Business Dean's Merit List 2013, 2014 & 2015
- Courses: Microeconomic Theory (1st place), Advanced Econometrics (2nd), Statistics (2nd), International Finance

## PROFESSIONAL EXPERIENCE

### RESERVE BANK OF AUSTRALIA

Sydney, Australia

*Senior Analyst, Securities Markets, Domestic Markets Department*

2020 – Present

- Conducting research into green bond markets to shed light on how markets are managing climate-related risks.
- Present developments in the Securities Markets to the Governor and board members monthly to inform monetary policy decisions.
- Produced monthly semi-government bond forecasts to inform the 2020 pandemic response, and quantitative easing (QE) program.
- Led initiative to streamline and automate the reporting of outstanding issuance used for daily briefings by implementing process improvements (creation of section R package, automated script scheduling, code version control).

*Analyst, Foreign Portfolio Risk & Compliance, Risk and Compliance Department*

2019 – 2020

- Led team of 5 to transition systems away from LIBOR to OIS rates. Team then enabled long-term FX swap trading (US\$5b) by extending the discount curve and implementing trading controls, allowing the Bank to meet Australia's IMF commitments.
- Headed team of 3 to simplify and automate the Bank's FX forward curve capture (in the Treasury system, Findur), as requested by the Board Audit Committee, to be used to value forward FX commitments for margining and external reporting purposes.
- Managed the daily process to value and margin the Bank's entire FX swap book in order to manage credit risk. Held final authority to manage margin call disputes between the Bank and its counterparties in line with the Banks contractual agreements.

### WORLD BANK

*Consultant, Data and Evidence for Justice Reform (DE JURE)*

Nov 2021 – Sept 2022

- In conjunction with Prof. Daniel Li Chen, leading the research design, theory of change and implementation of a Brisbane study into the impact of Quadratic voting on politicians in-parliament voting behavior and democratic legitimacy.
- Mentoring analyst to conduct data processing, exploration, visualization (in SQL, R) and provide weekly reporting to Prof. Chen.

*Research Associate, Data and Evidence for Justice Reform (DE JURE)*

Jun 2021 – Oct 2021

- Collaborated with the Kenyan Judiciary to improve their mediation process by implementing a novel case management system that uses machine learning to assign cases based on mediators' field of expertise, caseload, and performance.
- Developed pre-analysis plan and specified econometric model for the randomized control trial (RCT) used to assess the effectiveness of the platform.
- Created data quality and equitable allocation metrics; Built a real-time dashboard (using Metabase, SQL) to monitor results.

### RIO DE JANEIRO CITY HALL

*Research Associate, Department of Transport*

Jun 2021 – Aug 2021

- Aggregated public transport ticketing and GPS data; Created web application powered with analytics and visualizations to inform the city on how to more efficiently allocate buses based on transit demand for over 5,000 buses and 600 lines (RShiny, SQL).

### IBM

*Business Operations Analyst*

2017 – 2018

- Led department's response to an Export Compliance Audit, providing expert guidance on all information and data requests.
- Ensured audit readiness through effective process management, consultation with global team and senior management.

*Business Operations Graduate*

2016

- Managed the Export Compliance Program and IT Asset Management process. Ensured department's compliance with both AU and US export regulations through proactive communication, teamwork, and effective risk management processes.

## VOLUNTEER EXPERIENCE

### ENGLISH FOREIGN LANGUAGE VOLUNTEER TEACHER

2018 – 2019

- Developed curriculum and taught four classes a day (~50 students / class), for 3 weeks at a rural school in Henan, China in 2019.
- Taught four classes a day (6 students / class), for 7 weeks at a rural Junior High School in Chiayi, Taiwan in 2018.

## SKILLS

- Technical: SQL, R, Stata, Git, MS Office
- Accounting/Finance: Certified Practicing Accountant (CPA), with high distinction average
- Languages: English (Native), Chinese (HSK I & II, CERF B1 Intermediate)