

Luo, Jiahai

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EDUCATION

The University of Melbourne

Master of Science (Computer Science)

Bachelor of Science (Computing and Software Systems)

Parkville, Victoria, Australia

March 2018 - December 2019

March 2015 - December 2017

- **Coursework:** Algorithms, Artificial Intelligence, Machine Learning, Computer Systems, Distributed Systems, Cloud Computing, Programming Language Implementation, Discrete Mathematics and Operations Research
- **Research:** Explainable Artificial Intelligence (supervised by Professor Tim Miller)
- **Awards:** Runner-up (second place) in the Pac-Man Tournament 2019 of AI Planning for Autonomy, Melbourne Global Mobility 2016

Peking University

Peking University Summer School International Program 2016

Beijing, China

July 2016 - August 2016

- **Curricular Activities:** Advanced Biometrics, International Collegiate Programming Contest Training Camp

TECHNICAL SKILLS

Functional: Software Development, Site Reliability Engineering, Cloud Computing, Database Management, Machine Learning

Technologies: Python, TypeScript, Java, C, AWS, Docker, Kafka, GraphQL, Node.js, SQL, \LaTeX

PROFESSIONAL EXPERIENCE

REA Group (realestate.com.au)

Software Developer

Richmond, Victoria, Australia

March 2024 - Present

- Worked in the Customer 360, Customer Marketplace, Customer Product & Experience; managed and operated the software platform and data that power customer experiences for real estate agencies and businesses.
- Contributed to development of Customer Marketing Journey; built interfaces to populate marketable audiences and publish data to the marketing platform, enabling omni-channel marketing notifications.
- Led development of Customer Marketing Email Archiver; produced plan and documentation to coordinate implementation tasks; built a service in Lambda to process and archive email copies, facilitating access to the marketing communication history.

Amazon Web Services

Software Development Engineer

Sydney, New South Wales, Australia

October 2021 - March 2024

- Worked in the Modelled Change Management, Builder Tools; managed and operated the software tool that is used to define, review, schedule and execute changes to production systems.
- Contributed to development of Website Modernisation; analysed user requirements to refine the design; built a new website in React to replace the legacy Ruby on Rails site, modernising user interface and enhancing user experience.
- Contributed to development of Change Automation; engineered the system architecture to organise infrastructure; built services to automate changes on integrated systems, increasing change velocity, reducing errors, and minimising user toil.
- Led development of Executor for Change Automation; conducted proof-of-concept sessions to clarify the technical details; designed and implemented State Machine Activity workers in Step Functions to enable execution of automated changes.
- Revised search strategy on the API service to optimise performance by remodelling document structures and index mapping, resulting a 30% increase in search speed on Elasticsearch.
- Revised data persistence strategy on the API service to optimise performance by utilising single-table design on non-relational database, resulting a 20% increase in read and write speeds on DynamoDB.

Deloitte

Consultant

Melbourne, Victoria, Australia

March 2020 - October 2021

- Worked in the Cloud & Engineering, Core Business Operations, Consulting; provided technical consulting services to external organisations and clients; devised cloud-based solutions and software systems.
- Developed an application that integrates with Microsoft Azure infrastructure to transform invoices and ingest data into Dynamics 365.
- Built micro-services on OpenShift to transfer high volume real-time weather data; developed an integration testing solution in Cucumber.

The University of Melbourne

Teaching Assistant

Parkville, Victoria, Australia

March 2019 - February 2020

- Worked in the School of Computing and Information Systems, Faculty of Engineering and Information Technology; assisted course coordinator to conduct classes, prepare teaching materials, supervise examinations, and assess student assignments.
- Tutored, demonstrated and supervised the following subjects: Foundation of Computing, IT Project.