

# Luo, Jiahai

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## EDUCATION

<b>The University of Melbourne</b> <i>Master of Science (Computer Science)</i> <i>Bachelor of Science (Computing and Software Systems)</i>	<b>Parkville, Victoria, Australia</b> March 2018 - December 2019 March 2015 - December 2017
<ul style="list-style-type: none"><li>• <b>Coursework:</b> Algorithms, Artificial Intelligence, Machine Learning, Computer Systems, Distributed Systems, Cloud Computing, Programming Language Implementation, Discrete Mathematics and Operations Research</li><li>• <b>Research:</b> Explainable Artificial Intelligence (supervised by Professor Tim Miller)</li><li>• <b>Awards:</b> Runner-up (second place) in the Pac-Man Tournament 2019 of AI Planning for Autonomy, Melbourne Global Mobility 2016</li></ul>	
<b>Peking University</b> <i>Peking University Summer School International Program 2016</i>	<b>Beijing, China</b> July 2016 - August 2016
<ul style="list-style-type: none"><li>• <b>Curricular Activities:</b> Advanced Biometrics, International Collegiate Programming Contest Training Camp</li></ul>	

## 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

<b>REA Group (realestate.com.au)</b> <i>Software Developer</i>	<b>Richmond, Victoria, Australia</b> March 2024 - Present
<ul style="list-style-type: none"><li>• Worked in Customer 360, Customer Marketplace, Customer Product &amp; Experience; managed and operated the software platform and data that power the customer experiences for real estate agencies and businesses.</li><li>• Contributed to developments of Customer Marketing Journey; built interfaces to populate marketable audiences and publish data to the marketing platform, enabling omni-channel marketing notifications.</li><li>• Led the development of Customer Marketing Email Archiver; built a service in Lambda to process and archive email copies, facilitating access to the marketing communication history.</li></ul>	
<b>Amazon Web Services</b> <i>Software Development Engineer</i>	<b>Sydney, New South Wales, Australia</b> October 2021 - March 2024
<ul style="list-style-type: none"><li>• Worked in Modelled Change Management, Builder Tools; managed and operated the software tool that is used to define, review, schedule and execute changes to production systems.</li><li>• Contributed to developments of Website Modernisation; built a new React website to replace the legacy Ruby on Rails site, modernising user interfaces and enhancing user experiences.</li><li>• Contributed to developments of Change Automation; built services to automate changes on integrated systems, increasing change velocity, reducing errors, and minimising user toil.</li><li>• Led the development of Executor for Change Automation; engineered the system architecture; designed and implemented State Machine Activity workers in Step Functions to enable the execution of automated changes.</li><li>• Revised the 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.</li><li>• Revised the 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/write speeds on DynamoDB.</li></ul>	
<b>Deloitte</b> <i>Consultant</i>	<b>Melbourne, Victoria, Australia</b> March 2020 - October 2021
<ul style="list-style-type: none"><li>• Worked in Cloud &amp; Engineering, Core Business Operations, Consulting; provided technical consulting services to external organisations and clients; devised cloud-based solutions and software systems.</li><li>• Developed an application that integrates with Microsoft Azure infrastructure to transform invoices and ingest data into Dynamics 365.</li><li>• Built micro-services on OpenShift to transfer high volume real-time weather data; developed testing solutions in Cucumber.</li></ul>	
<b>The University of Melbourne</b> <i>Teaching Assistant</i>	<b>Parkville, Victoria, Australia</b> March 2019 - February 2020
<ul style="list-style-type: none"><li>• Worked in School of Computing and Information Systems, Faculty of Engineering and Information Technology; assisted course coordinators to prepare teaching materials, supervise examinations, and assess student assignments.</li><li>• Tutored, demonstrated and supervised the following subjects: Foundation of Computing, IT Project.</li></ul>	