

James Barnes

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<https://jimbbx.github.io>

EXPERIENCE	Software Engineering Specialist , Telstra	2023 – <i>present</i>
	<ul style="list-style-type: none">• Developed a novel, declarative, test-automation framework to perform end-to-end testing of a large CRM system,• Refactored existing test-automation system and associated APIs for ease of development,• Translated business requirements into new products and orchestration plans on a large CRM system,• Developed billing-related Java Spring Boot APIs	
	Software Engineering Intern , Telstra	Summer 2020 – 2021
	<ul style="list-style-type: none">• Developed novel features for the MyTelstra apps,• DevOps responsibilities relating to the MyTelstra apps, including deployments,• Created quality assurance tests for the MyTelstra app (Android, Android, web),• Constructed onboarding and walkthrough materials for future employees	
	Academic Tutor & Demonstrator , The University of Melbourne	2019 – <i>present</i>
	<ul style="list-style-type: none">• Tutored content on introductory programming, declarative programming, and theoretical computer science,• Delivered tutorial content to postgraduate, first-year & final-year undergraduate students,• Graded assignments, projects, and exams of over 1500 students,• Developed build tools to automate the creation of teaching materials,• Delivered hands-on, one-on-one demonstration sessions	
	Head Academic Tutor , The University of Melbourne	2022
	<ul style="list-style-type: none">• Created assignment, tutorial, and exam material on theoretical computer science,• Assisted in the delivery of course materials in a lecture format	
	Data Analyst , WorkSafe	Summer 2019 – 2020
	<ul style="list-style-type: none">• Developed automated tools to scrape, clean, and validate confidential and public company records	
EDUCATION	Master of Computer Science , The University of Melbourne	2020 – 2022
	<ul style="list-style-type: none">• Grade: First Class Honours (87.800 WAM)• Thesis: Higher-Order Programming in Wybe (link)• Developed a higher-order extension to an existing language, Wybe• Formalised the Wybe type system	
	Bachelor of Science , The University of Melbourne	2017 – 2019
	<ul style="list-style-type: none">• Grade: First Class Honours (83.000 WAM)• Major: Computing and Software Systems• Created a web-based family heirloom register, allowing for users to upload and share their family heirlooms with other users	
AWARDS	UniHack'21 First Place , Scalr.io (link)	2021
	<ul style="list-style-type: none">• First-prize winning UniHack'21 submission built with a team of five in 48 hours,• Created a low-code platform for users to upload existing machine learning models, automatically creating REST endpoints that serve as an interface to said models,• Scalable infrastructure that expands with users' requirements• Developed a basic UI for the platform	

SKILLS

Technical JavaScript (Node.js), TypeScript, Python (Pytorch, Numpy), Java (Maven, Spring, Spring Boot), C, C++, Haskell, Prolog, Git (GitHub, GitLab), Bamboo, Postman, Cucumber (Gherkin), agile methodologies (JIRA), Salesforce (Apex, Vlocity)

Languages English (*native*), Mandarin Chinese (*basic*), Indonesian (*basic*)

VOLUNTEERING **Student Representative**, Master of Computer Science

2022

Student Representative, Distributed Algorithms

2021

Student Representative, Advanced Theoretical Computer Science

2020