

Joseph Cheng

☎ +1 (647) 904-9544 — ✉ hello@josephchengdev — 🔗 linkedin.com/in/josephchengdev — 🌐 www.josephcheng.dev

Experience

Google

Software Developer

April 2025 – Present

Waterloo, Canada

- Member of the Gmail Delivery Team which maintains and operates the core email delivery infrastructure of Gmail. The Delivery infrastructure processes billions of messages every day. The mission of the team is to route correctly every message reliably, securely, and efficiently and to make Gmail the best email platform in the world.
- Technology Used: C++

Amazon

Software Engineer

July 2023 – March 2025

Toronto, Canada

- Acting as the lead developer for my team in a multi-team initiative with the goal of enabling fulfillment center employees to seamlessly switch between multiple roles resulting in enhanced labor flexibility and driving significant cost savings for Amazon. Also helped to develop the code for rolling out the initiative in Europe.
- Updated my team's critical tier 1 service that vends basic employee information to countless customers to support re-driving employees in bulk leading to rapid recovery in disaster scenarios.
- Created a dashboard used at the director level to track critical business metrics and identify focus areas. The dashboard contributed to a decrease in employee safety risks across Amazon fulfillment centers by 5%.
- Adapting my team's product to better suit clients based on interviews we conducted during visits to Amazon fulfillment centers across North America. Led to an improved client experience based on text feedback.
- Streamlined my team's processes in response to team feedback during retrospectives and gave status updates directly to upper management at the end of every sprint during my several month tenure as scrum master. Helped prevent some high severity tickets by developing a system to triage for some auto-escalating low severity tickets.
- Responsible for splitting my team's Tier 1 service fleet into two separate fleets such that API calls for single associates and multiple associates ran on separate fleets. Led to significantly increased service resiliency by enabling more scaling flexibility and alarm finetuning capabilities.
- Technology Used: Java, Python, SQL, and AWS Products (EC2, ECS, S3, CloudFormation, DynamoDB, Lambda, and DocumentDB)

Amazon Web Services (AWS)

Software Engineer Intern

May 2022 – August 2022

Vancouver, Canada

- Created a load balancer log file parser to identify inbound requests using older versions of TLS (1.0/1.1) and extract important header metadata from those requests. Resulted in a system to notify customers using older versions of TLS of the risks it might pose for their applications.
- Designed and set up infrastructure to automate and scale the log parser, allowing the parser to run against all API Gateway load balancers across every region simultaneously, thereby greatly improving efficiency.
- Created a utility program that queries an internal database to add more useful metadata to the log parser output.
- Technology Used: Python and AWS Products (EC2, S3, CloudFormation, Step Functions, Athena, DynamoDB, EventBridge, and Glue)

Capital One

Software Engineer Intern

January 2022 – April 2022

Toronto, Canada

- Rebuilt parts of the front end of a client-facing credit card application system using Angular. Implemented the unit tests to go along with it. Resulted in an improved application experience for prospective customers of Capital One.
- Helped fix broken internal Angular Components used site wide and updated them to be more inline with an updated website design. Added unit tests to raise code coverage from 70% to 90%.
- Technology Used: Angular, Karma, and Jasmine

Education

University of Waterloo

Bachelor of Computer Science (Honours), Co-operative Program

2018 – 2023

Waterloo, Canada

- Cumulative GPA: 84.00% / Major GPA: 87.53% (Graduated with Distinction)
- 2019 President's Scholarship of Distinction
- Winter 2019 Math Endowment Fund Computer Science Representative