+1 (226) 582-8778 biz@carlzhou.com https://carlzoo.github.io

Employment

Software Engineer Dashlane July 2022 - Aug 2023

- Built API hosted on AWS with NodeJS, Typescript, Redis and MySQL empowering IT admins to generate 2FA recovery codes on behalf of employees, reducing customer support contacts
- Developed NodeJS API and ReactJS dashboard of Account Recovery feature for over 15 million users

Senior Software Engineer

StockX

Feb 2020-July 2022

- Built a scalable OAuth2.0 compliant user authentication system in NodeJS and PHP for 5 million+ active users, which communicated with other microservices via Amazon SQS during user signup
- Worked with compliance team to process GDPR and CCPA requests with program written in Go
- Developed a fraud prevention NodeJS Docker microservice on AWS that integrates multiple external payment fraud detection vendors to analyze orders and protect the company from fraudulent transactions worth over \$50 mil. dollars (5% of revenue)

Junior Software Engineer

Rapid7

June 2018-May 2019

- Developed Ruby tool for generating and deploying software vulnerability protection checks to defend enterprise companies' infrastructure software such as Microsoft Windows, Oracle Database
- Increased coverage and improved accuracy of plugins in Java software fingerprinting engine, including the new detection of a critical vulnerability in Zoom

Crypto Solutions Dev Intern

William Hill Australia

May 2017 – Aug 2017

• Implemented a REST API to process Bitcoin transactions and in C# (.NET Core), which reduced payment processing costs by over 50%, and also eliminated fraudulent chargebacks

QA Engineering Intern

Symphony Commerce

Aug 2016 - Dec 2016

• Detected and reduced errors on live site with automated tests using TypeScript and Powershell scripts

Malware Research Assistant

Nokia

Jan 2016 – Apr 2016

Analyzed malware samples and wrote Snort Network IDS signatures to detect malicious network traffic

Web Developer Intern

University of Waterloo

May 2015 - Aug 2015

- Improved school campus visitor experience by rebuilding PHP (Drupal CMS) website based on visitors and tour staff feedback
- Increased leads for newsletter campaigns by integrating booking website and MySQL database with Sugar-CRM to capture contact information from signups

Web Developer Intern

Orchard Labs Inc.

Apr 2014 – Aug 2014

- Lowered order processing time by creating a responsive shipping label generator in PHP, MySQL, JavaScript, and Bootstrap CSS ,which integrated with the Canada Post API
- Reduced incoming inquiries from customers by 25% after developing an order status page

Languages and Technologies

- Proficient: AWS, NodeJS, PHP, Java, C#, TypeScript, SQL, JavaScript, Git, HTML, CSS, Docker
- Familiar: Android, C, C++, Go, Redis, Bash, Kafka, Powershell, Python, Selenium, Kubernetes, Ruby

Education

Waterloo, ON

• Bachelor of Computer Science with Minor in Psychology.