# Carl Zhou

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# **Employment**

Software Engineer Dashlane July 2022 - Present

- Built API with NodeJS, Typescript, Docker, AWS, and MySQL for IT admins to generate 2FA recovery codes on behalf of employees, preserving zero-knowledge architecture and reducing customer support contacts
- Built Node.JS API and React is dashboard of Account Recovery feature for over 15 million users

# **Senior Software Engineer**

#### StockX

Feb 2020-July 2022

- Developed a scalable user identity system in NodeJS, and PHP to handle over 5 million active users
- Worked with compliance team to process GDPR and CCPA requests with program written in Go
- Designed and developed a fraud prevention service which integrated three external payment fraud detection vendors to analyze credit card, mobile and Paypal payments, protected the company from \$50 mil. dollars (5% of revenue) of fraudulent transactions

# **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

• Protected ISPs and their customers from the latest malware threats by analyzing malware samples, and then writing Network IDS signatures to detect malicious network traffic based on analysis

### **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.