

Brandon Wang

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Programming Languages

Python

Go

C++

C

Java

JavaScript

TypeScript

Technologies

Git

Node

React

Redux

MongoDB

Redis

Docker

AWS

Flask

Android

Education

University of Illinois at Urbana-Champaign

08/2017 - 01/2021

B.S., Major: Computer Science, Minor: Electrical Engineering, M.C.S.

GPA: 4.0 / 4.0

- Dean's List | James Scholar

- Relevant Coursework: Computer Security 1 & 2, Communication Networks, Distributed Systems, Applied Cryptography

- Recipient of the FMC Award of Excellence and the Robert M. Stephens Engineering Scholarship

Experience

Plaid | Software Engineer Intern

05/2020 - 08/2020

- Introduced a new lightweight API endpoint that reduced the latency of loading Plaid Link, a user's main connection to Plaid, by as much as 45%

- Reduced inbound engineering requests and turnaround time for internal business teams by designing a self-serve tool to configure Plaid Link's error panes, which are sensitive to some of Plaid's relationships with financial institutions

- Pioneered a new Plaid product aimed to help non-profit organizations collect donations from small donors by simplifying the donation process

Stripe | Software Engineer Intern

05/2019 - 08/2019

- Implemented an extendable audit logging protocol for Stripe's internal LDAP permissions management system to increase security observability

- Exposed LDAP audit logs by designing an intuitive, least-privilege API, to be used in advanced alerting and metrics tooling

- Led the life cycle of a high security impact project, from drafting design documents and soliciting input from security teams to synthesizing significance and achievements in a company-wide report

Chicago Mercantile Exchange Group | Software Engineer Intern

03/2018 - 08/2018

- Modeled crop yield data with linear regression and neural network models to find insight about commodities market

- Engineered a modular metric analytics reporting application aimed to streamline the creation of custom reports

Research

Internet Toplists

10/2019 - now

- Investigate the correctness of popular Internet Toplists, which form the basis of much security research

- Perform correctness measurements against data obtained from our partners at Cloudflare

Visa IoT Software Defined Networks

12/2018 - now

Advisor: Professor Sijin Mohan

University of Illinois Urbana Champaign

- Designing a distributed SDN framework to measure packet latency and available bandwidth in subnets

- Collaborating with Visa to implement the framework in IoT-enabled financial networks

Detection and Measurement of Insecure IoT Devices

06/2016 - 06/2017

Advisor: Professor Zubair Shafiq

University of Iowa

- Analyzed three-years of data on over 100,000 IoT devices to characterize trends in patching behavior

- Correlated data with known patch releases and constructed models to predict future behaviors

Publications

Measurement and Analysis of Patching Practices for Industrial Control Systems

06/2017

Brandon Wang, Xiaoye Li, Leandro P. de Aguiar, Daniel S. Menasche, Zubair Shafiq

ACM International Conference on Measurement and Modeling of Computer Systems

Leadership

Engineering Open House Senior Corporate Director

08/2018 - 04/2020

- Reached out to potential corporate partners to get them involved with Engineering at Illinois

- Oversaw the corporate COVID-19 response after the EOH 2020 cancelation and organized a plan to cater to corporate expectations and meet EOH requirements

CS 461 Computer Security Course Assistant

08/2019 - now

- Host office hours, help students on the class forum, write new exam questions, and proctor and grade exams

Projects

Pseudonyms

03/2020 - now

- A multiplayer board game based off of Codenames that uses socket.io for realtime communication

- Implemented a distributed backend that shares socket state with Redis and achieves zero-downtime during redeploys