Christine Hsu

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EXPERIENCE

Google | Software Engineering Intern, Ads Overview MAY 2019 - AUG 2019

Added actionability to landing page for Google Ads customers

- Launched flow to save multiple keywords at a time to target advertisements; reaches 800k customers per day
- Created new component to modify targeted network types
- Designed data and mutate models to fetch and save data
- Implemented with Angular Dart, HTML, and CSS

Google | Engineering Practicum Intern, Google Cloud

MAY 2018 - AUG 2018

- Built new remote procedure call endpoint in C++ to generate token exchange for service account self-impersonation flow
- Deployed dark launch of endpoint by comparing generated tokens; 25k QPS expected once fully launched
- Communicated closely with other teams to smoothly separate and migrate flow from original Java code
- Wrote extensive design docs

Programming System Lab | Undergraduate Researcher

- Member of Gail Kaiser's Programming Systems Lab in exploratory Semantic Security bug detection with Pseudo-Oracles project (SESPO)
- + Explore how metamorphic properties can be utilized in a computer security context to expose semantic security bugs

Applied Optoelectronics | Software Development Intern

JUNE 2017 - AUG 2017

- Built full-stack equipment monitoring program to detect toxic gas leaks; front-end with Javascript and HTML/CSS, back-end with C#, ASP.NET. Reduced wait time by 5 seconds
- Identified weaknesses in company website and redesigned it using Photoshop, HTML/CSS, Javascript

PROJECTS

"bawk" Programming Language Compiler

- + C and awk-inspired programming text-processing language
- Wrote scanner, parser, abstract syntax tree, semantic type checking, and code generation to assembly-like LLVM
- Written in OCaml functional language and LLVM IR

Bespoke | Winner of Capital One Hackathon

- Customizable wearable credit cards with NFC, 3D printing
- Built NFC Reader Android mobile and web apps with Nessie API and Flask

Ask Alma | Winner of Columbia Devfest Journalism Prize

- Facebook Messenger bot to provide students with information about
- Python, BeautifulSoup for web scraping, API.ai, Heroku

EDUCATION

Columbia University

B.S. in Computer Science May 2020, 3.80/4.00 GPA

Latin honors: cum laude

Computing in Context Python TA, Girls Who Code Executive Board, Momentum Dance Team. Application Development Initiative, Rewriting the Code

SKILLS

Languages & Technologies:

Familiar: Python, Java, C++, HTML/CSS, AngularDart, Javascript,

iQuery, Flask

Proficient: C, BeautifulSoup, SQL

Other:

Git, Photoshop, Vim

Relevant Coursework:

Machine Learning, Natural Language Processing, Databases. Computer Vision, Programming Languages & Translators (Compilers), Artificial Intelligence, Analysis of Algorithms, Advanced Programming in C/C++, Fundamentals of Computer Systems, Computer Science Theory, Intro to Java, Python, Data Structures & Algorithms, Discrete Math

AWARDS / HONORS

1st Place - Capital One Hackathon

"Best Use of Journalism" - Columbia Devfest Hackathon

Columbia Dean's List

Girls Who Code Alumni Ambassador