

Derek Xu

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WORK EXPERIENCE

Google (Seattle, WA) September 2019 - December 2019

Software Engineering Intern (Dart Web)

- Was the primary contributor to the [js_facade_gen](#) library, which generates JavaScript ↔ Dart interoperation code by manipulating the ASTs obtained from TypeScript .d.ts files
- Added support for new TypeScript features and took advantage of new Dart features like static extension methods to improve generated code's usability and type safety
- Added a feature for serializing ASTs as JSON

Google (Cambridge, MA) January 2019 - April 2019

Cloud Service Monitoring Frontend Intern

- Created new reusable timeline slider Angular component that has been integrated into several service monitoring tools
- Designed the slider to present time domain data effectively through intuitive selection paddle and hovercard behavior
- Exposed the slider's internal D3 rendering mechanism through standard Angular component APIs by using structural directives and template binding
- Rewrote topology graph query service to utilize RxJS

TD Asset Management (Toronto, ON) May 2018 - August 2018

Portfolio Analytics Intern (Full Stack)

- Created new multi portfolio exposure tool in React/Redux that allows portfolio managers to compare various metrics of securities held across multiple portfolios

PROJECTS

FluxNote Electric City Hacks 2017

HTML5 + JavaScript, Socket.io, Node.js

- App that mathematically calculates and tracks the position of a magnetic pen from a phone's magnetometer readings

EDUCATION

University of Waterloo 2017 - 2022

Candidate for Bachelor of Software Engineering

SKILLS

Web Technologies

TypeScript, React, Redux, Angular, JavaScript, D3, Dart, Python, RxJS, Jasmine, jQuery, HTML, CSS, Flask, Django, SQL

Application Development

C/C++, OpenFrameworks, Java, Processing, React Native

Tools

Vim, Git, VSCode

AWARDS

2017 Electric City Hacks 3rd Place

2017 ECOO Programming Contest Eastern Ontario Regional Champions

USA Computing Olympiad Gold Division

INTERESTS

Competitive Programming

Top 25% of users on CodeForces and CSAcademy

98th percentile in HackerRank algorithm contests

Music

Guitar, Singing, Piano, Analysis

Yoyoing

Soccer