Derek Xu



WORK EXPERIENCE

Google (Seattle, WA) September 2019 - December 2019 Software Engineering Intern (Dart Web)

- Worked on the js_facade_gen library, which generates
 JavaScript
 Out interoperation code by manipulating the
 ASTs obtained from TypeScript interface declaration 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

SKILLS

Application Development

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

Web Technologies

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

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

Candidate for Bachelor of Software Engineering