

Derek Xu

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WORK EXPERIENCE

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
- Manipulated cash flow spreadsheets with Pandas and automated uploading them to SQL Server database

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
- Data is sent through a Socket.io backend to a web app which lets the user draw, edit and save images

muBot 1A Final Project 2017

Raspberry Pi, Python, GPIO, SciPy

- Robot that dances and flashes LEDs to the beat of any song
- Parallelized fast fourier transform implemented to provide optimal performance during spectral flux onset detection

EDUCATION

University of Waterloo 2017 - 2022

Candidate for Bachelor of Software Engineering

SKILLS

Application Development

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

Web Technologies

React, Redux, Angular, TypeScript, JavaScript, D3, RxJS, Python, 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

Grade 12 Computer Science (ICS4U) Subject Award

INTERESTS

Competitive Programming

Top 20% of users on CodeForces and CSAcademy

98th percentile in HackerRank algorithm contests

Music

Guitar, Singing, Piano, Analysis

Yoyoing

Soccer