jeffreyxiao

1.647.919.3171 // jeffrey.xiao@uwaterloo.ca

jeffreyxiao.me // jeffrey-xiao // jeffreyxiao

EXPERIENCE

Google — Mountain View, California
Software Engineering Intern — Sept 2018 – Dec 2018

- Building large-scale, robust data analysis pipelines and serving machine learning models to improve online ads prediction accuracy.

datacoral Inc — San Francisco, California
Software Engineering Intern — Jan 2018 – Apr 2018

- Scoped out, architected, and implemented highly scalable materialized views in Redshift using Kinesis Data Streams, DynamoDB, and Lambda.
- Used timelabel tags to represent the state of underlying data, update materialized views when dependencies get updated, and handle schedule and view definition changes.
- Built critical APIs and migration scripts to launch a web application for monitoring materialized views and data pipeline performance.

Yelp — San Francisco, California
Software Engineering Intern — May 2017 – Aug 2017

- Explored and evaluated solutions for better client-side JS error reporting.
- Implemented and rolled out infrastructure to process over 25 million errors every month to over 20 services.
- Modernized build pipeline and built tooling to migrate services from Google Closure Library to ES6 and Webpack, and from npm to yarn.
- Helped develop infrastructure and tooling to migrate services to React, including server-side rendering of React components.

Ivy Global — Toronto, Ontario
Software Engineering Intern — Nov 2015 – Sept 2016

- Led the development of a bubblesheet scanner and grader using convolutional neural networks, and custom image processing algorithms to process blurred, tilted, and imprecise images.
- Developed an ASP web application that displays SAT scores and statistics for mock exams in real-time.

PROJECTS

kademlia-dht-rs — Personal Project
github.com/jeffrey-xiao/kademlia-dht-rs — Rust, Distributed Systems

- A flexible implementation of Kademlia, a distributed hash table.
- Used strict parallelism to efficiently send RPCs to probe nearby nodes.

inSight — Greylock Hackfest
goo.gl/Qy4TcJ — Python, C++, Unity, TensorFlow

- Built an interactive AR headset that uses machine learning and custom image analysis algorithms to display information about the user's point of focus.
- Applied gaze tracking to enable full control of headset via eye movement.
- Used Bing and IoT technology to control home appliances and learn about surroundings in an intuitive way.

SKILLS

Proficient

Java // C // C++ // C# // Rust
JavaScript // React // Node
Python // Git // Linux

Familiar

Bash // Go // Scala

AWARDS

- First, Greylock Hackfest // *2017*
- Second, MIT Battlecode // *2017*
- Fourth, ACM ICPC East Central North American Regionals // *2016*
- Bronze, International Olympiad in Informatics // *2016*
- Gold, Canadian Computing Olympiad // *2016*
- Silver, Canadian Computing Olympiad // *2015*
- Platinum Division, USA Computing Olympiad // *2015*

CERTIFICATIONS

- Certified Java SE 6 Programmer
- Algorithms I & II, *Princeton*
- Machine Learning, *Stanford*
- R Programming, *Microsoft & JHU*

EDUCATION

University of Waterloo

Bachelor of Software Engineering
2016 – 2021 // Waterloo, Canada

- 93.24% Cumulative Average
- Dean's Honour List (4 Terms)

INTERESTS

- Distributed Systems
- Data Infrastructure
- Concurrent Computing
- Database Internals