Justin Goping

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Technical Skills

- Languages: JavaScript, C/C++, Python, Kotlin, C#, Octave
- Frameworks: Angular, ASP.NET Core, React
- Databases: Oracle, MongoDB
- Tools: Android Studio, Bash, CSS, Git, GraphQL, HTML, Unit Testing

Work Experience

TribalScale Agile Software Engineer **January 2019 – April 2019**

- Redesigned a Spring Boot backend to transform traditional endpoints into one endpoint with GraphQL support in order to increase customization for the different clients
- Developed features for an Android FireTV family radio app which included blocking content, a settings screen, and improved background animation handling
- Created a deeplink from the regular radio app to the family app and generated builds to send to the client for testing
- Turned designs into a functional website using React and Redux to give an old project a modern redesign

Finastra Software Developer **May 2018 – August 2018**

- Worked on an Agile software development team on a Web Application used for ordering cheques
- Built model and controller in .NET Core to send data from SQL Database to the Angular frontend
- Implemented new security features into the front end using RouteGuards and backend using policies and handlers so that features are protected from unauthorized users
- Wrote creation, insertion, and deletion scripts with required documentation to set up and deploy SQL tables

Laborie Medical Technologies Software Engineer **July 2017 – August 2017**

- Sourced and evaluated various Java-compatible 3D plotting libraries to implement a new acoustic measurement device to make data easier to interpret for doctors
- Created a prototype which included integrating real-time 3D rendering functions using the Jzy3d library
- Implemented real-time weighted moving average filter with user-adjustable controls to reduce choppiness of the data

Projects

Golf Tournament AR

- Created an Augmented Reality app for golf spectators to gather information on surrounding holes and players
- Connected iOS app to a Flask server so that it polls for data every 5 seconds for player GPS positions and stats

AtariBot

- Setup a convolutional neural network to perform deep reinforcement learning on the Atari game “BrickBreaker”
- Implemented architecture described in Deepmind Papers with Python and Keras and OpenAI Gym

OnBoard

- Created a Learning Management System so that onboarding courses can be created and edited for new employees
- Setup the backend to store the course content using Node.js, MongoDB, and GraphQL and used React for the frontend

Handwritten Digit Recognizer

- Implemented feedforward/backpropagation algorithms for a neural network to classify digits with a 95.1% accuracy
- Applied knowledge gained from Andrew Ng’s online Machine Learning course

Education

- Candidate for Bachelor of Computer Science, University of Waterloo, 2017-2022