

ZiGao

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Skills

LANGUAGES

Python
JavaScript (ES6)
TypeScript
Java
C++

TECHNOLOGIES

Node.JS
Express.JS
Flask
React.JS
HTML5/CSS3
Tensorflow
Android Studio
SQL

ADDITIONAL SKILLS

Git VC
Object Oriented Programming
Data Structures and Algorithms
Bash Scripting
Linux
Docker

Education

University of Ottawa
Bachelor of Software
Engineering Expected 2021

Coursera - Stanford
University
Specialisation in Algorithms

Coursera - University of
Michigan
Web Development

Coursera - Stanford
University
Introduction to Machine
Learning

Employment

Wind River Systems (formerly Intel Corp) · Ottawa, ON

Software Intern · May 2018 to Aug. 2018

- Currently working on a neural network model using TensorFlow to dynamically detect, analyse, and diagnose test case failures (personal initiative)
- Designed and programmed a priority queue target reservation system, using Python and Flask, significantly reducing wait times and request collisions
- Ported all dev and test environments to Docker and Vagrant, and developed bash setup scripts, eliminating environment issues and reducing setup time by 90%.
- Created automation test code for scheduled/regression testing in C and Python
- Implemented symmetric multi-processing code for VxWorks GuestOSes
- Trained new COOPs on core product infrastructure and test plans
- Practiced software development and testing using Agile methodology

Freelance · Ottawa ON

Full-Stack Web Developer · June 2017 to Current

- Designed UI and UX, created mockups, and wireframes
- Programmed website front ends using React, jQuery, HTML and CSS, Bootstrap
- Developed back end code using Node + Express, and Flask
- Stored and queried data using MongoDB and Firebase realtime DB
- Configured online server hosting services and domain names

Projects

LynqUp : Social Media Side Project - TypeScript, Node.JS, Express.JS, React.JS ·

- Developed back end friend graphs and user account infrastructure
- Implemented a friend and event recommendation algorithm
- Designed a calendar merge function to find available time slots for multiple users
- Created dynamic front end views using React.JS

ParkMe - AWS, Google Maps API, Node.JS

- Implemented AWS Rekognition API to parse important text (e.g. date and time, parking duration) from parking sign pictures taken by users
- Validated user input and stored information as nodes in Firebase DB
- Loaded available parking locations on Google Maps using Maps API
- Led team to successful project completion in under 24 hours at uOttHack

Virtual Fighterz (Street Fighters on Kinect) - Processing, Java

- Created a virtual fighting game where the camera picks up the player's joints via image processing and tracks them
- Implemented a two player fighting mode connected via network
- Designed a custom and efficient unit collision detection algorithm

More Projects can be Found at ZiGao.io and on my Github ·

Awards

HackerRank Competitive Programming Silver Medal 2018
Placed in top 10% of competition

Governor General of Canada Academic Medalist 2017
97 Average Gr.11, 98 Average Gr. 12

Canadian Computing Competition Certificate of Distinction 2017

Schulich Foundation · **Schulich Leader Nominee** 2017

University of Ottawa · **Chancellor's Scholarship Finalist** 2017

University of Waterloo · **Waterloo Mathematics Contest Certificate of Distinction**