Zhicheng (Alex) Wen

alexanderwen.me
github.com/alexander-wen
613-857-7088
alex.wen@uwaterloo.ca

EMPLOYMENT

Blue J Legal
Jan '16-Apr '16
Software Developer
- Developed web apps using **React.js, Redux** frontend, **Node.js, Koa.js** backend, and **MongoDB** database
- Set up and trained **Azure** and **Watson Machine Learning** services
- Created **Node.js**, **Python**, and **RegEx** scripts to generate and analyze machine learning data
- Contributed to machine learning api architecture, and database schema

Blackberry
May '15-Aug '15
Firmware Developer
- Developed sensor drivers in a **Linux** coding environment using **C** and **C++** for the Priv Smartphone
- Fixed several gating issues that prevented release
- Created **android** mobile test app used for testing drivers

PROJECTS

Neural Network
Jan '16-Cur.
github.com/Alexander-Wen/basic-neural-network
Python, NumPy, SciPy
- Simple neural network with two inputs and a single output
- Single hidden layer of synapses using a sigmoid activation function
- Implemented concepts such as back propagation and gradient descent

Reflect Smart Mirror
Jan '16-Cur.
github.com/ProjectReflect
React.js, Node.js, Koa.js, RESTful API
- Smart mirror that displays relevant information such as weather and time
- Pulls in productivity and health data through various RESTful API calls

PhantPower Smart Outlet
Jan '15
github.com/Alexander-Wen/PhantPower
C, Android, Java, XML
- Smart outlet that can be controlled by a Myo, Pebble, or Android App
- Detects phone charge to prevent overcharge by turning off and on at set phone battery levels

Fluid
Jan '14
github.com/Alexander-Wen/Fluid
C#, HTML, CSS
- Parses a general template file and a general body file to generate a fully functioning website
- Template and general body file written in proprietary language

LANGUAGES

Proficient
Javascript, ES6, C, C++, Java, LaTeX, RegEx, HTML, CSS

Familiar
Shell Scripting, C#, Python, MatLab, jQuery, ARM Assembly

TOOLS

IDEs
Eclipse, Visual Studio, Dev-C++

Productivity
Git, JIRA, Microsoft Office, LaTeX

Frameworks
Node.js, Koa.js, Express.js, React.js, Redux.js, Android, Numpy, SciPy

Operating Systems
Linux, OS X, Windows

EDUCATION

Honours Computer Engineering
Candidate for Bachelor of Applied Science (B.A.Sc.)

Expected Apr '19

INTERESTS

Rock Climbing, Longboarding, Violin, Cycling, Puzzles, New Technologies