

Zhicheng (Alex) Wen

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EMPLOYMENT

Nvidia

Sept '16-Dec '16

Software Developer

- Designed and coded automated **python** auto white balance validation framework from the ground up
- Lead **design review** to propose and present new auto white balance solution
- Used multiprocessing to greatly simplify **C++ cross platform** image tuning program

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 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

Toggle 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

LANGUAGES

Proficient

C++, C, Python, Java, Javascript, ES6, Regex,

Familiar

Shell Scripting, Batch scripting, C#

TOOLS

IDEs

IntelliJ, Eclipse, Visual Studio, Dev-C++

Productivity

Git, Vim, JIRA, LaTeX

Frameworks

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

Operating Systems

Linux, Windows, OS X

EDUCATION

Honours Computer Engineering

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

Expected Apr '19

INTERESTS

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