Arthur K. Zhang

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Education

University of Michigan, Ann Arbor, MI ***May 2022***
Bachelors in Science and Engineering (Intended Major: Computer Engineering) *GPA: 3.925/4.0*
Coursework: Differential Equations, Discrete Mathematics, Algorithms and Data Structures

Work Experience

Clinc (Software Developer Intern) ***June - August 2018***

- Developed and optimized website features on Spotlight AI platform across full web stack to improve user experience for global corporate clients, such as isBank and USAA
- Architected an end-to-end automated testing infrastructure using Selenium that reduced bugs pushed to production by 40%

Extracurricular Activities

University of Michigan Spark Electric Motorcycle Racing Team ***August 2018 - Present***

- Built in-browser telemetry system gui using javascript and Vue.js and sensor fusion algorithm in C for displaying real-time motorcycle performance metrics
- Designing custom PCBs for Arduino telemetry and battery management systems using Altium Designer to improve motorcycle battery performance during races

Lynbrook FIRST Robotics, San Jose CA ***September 2016 - June 2018***

- Vice President of Lynbrook Robotics Club. World Champs FIRST Robotics team.
- Designed robot climbing system with four stage gearbox using Inventor, integrated computer vision for automated game piece intake, led technical workshops for high school robotics students on CAD design and Mechanical systems

Leadership

Founder and CTO of Backlyncs. (Website Creator and Technical Advisor) ***June 2017 - August 2018***

- Backlyncs. is a non-profit startup for connecting underprivileged, talented high school students to companies through website design contests
- Architected web platform backend to handle high-load application file submissions using Firebase and Node.js

Projects (Github: https://github.com/KingArthurZ3 Personal Portfolio: www.arthurkzhang.com)

Mr. MarketWatch (https://github.com/KingArthurZ3/MrMarketWatch)

- A collection of ML models that analyze stock market technical data and recommend specific stocks to buy based on their predicted profit/loss ratio; written in Python and Javascript on top of Tensorflow and Vue.js frameworks.

AutoNote (https://github.com/KingArthurZ3/AutoNote)

- Desktop app that converts speech to text and automatically formats notes by processing text using keyword mapping; Graphical interface designed using Java Swing and Speech Synthesis built using Java and Google Compute Engine

Electric Longboard (http://www.arthurkzhang.com/#/projects)

- Electric Longboard with custom built in hub motors and battery management system; designed with Altium, Autodesk Inventor, and CATIA V5

Fashion-mnist (https://github.com/KingArthurZ3/fashion-mnist)

- A Convolutional Neural Network that recognizes images of clothing and classifies them by clothing type; analyzed in Python with Tensorflow Backend

Sentiment Reviewer (https://github.com/KingArthurZ3/sentiment-reviewer)

- A Neural Network written that determines whether a user likes or dislikes a business by using NLP to process their reviews; written in Python using Sci-kit learn libraries

Breast Cancer-Analyzer (https://github.com/KingArthurZ3/breastcancer-detector)

- A Random Forest Classifier Model that analyzes features in breast cancer diagnoses to determine if it is malignant or benign; programmed in Python on top of Sci-kit learn libraries

Skills

Computer Programming: C++, C, Javascript, Html & Css, Python, Tensorflow, Vue.js, Django, MySQL, Java, Matlab, Selenium
Computer Aided Design: Autodesk Inventor, Solidworks, CATIA V5, Altium PCB Designer, Autodesk Eagle
Other: Microsoft Excel, Adobe Photoshop, Adobe Lightroom