Alan Chen

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EDUCATION: **University of Massachusetts, Amherst**   **Expected Graduation Date: May 2021**
Bachelor of Science in Computer Engineering

RELEVANT COURSES:

- Intro Electrical & Comp Engin
- Computational & Analytical Tools
- Intro to Programming
- Data Structures
- Intro/Digital and Computer Sys
- Circuits and Electronics

TECHNICAL / NON-TECHNICAL SKILLS:

- Fluent(speaking) in Mandarin
- Arduino, Java, Python , MATLAB, Linux, Web Development

PROJECTS/ RESEARCH:

Arduino Air Sensor   **Team Member**   **September 2017 – December 2017**
- Worked as a team to build an Arduino Air Sensor
- Designing the air sensor, connecting SD cards to sensors and retrieving data, soldering, 3-D printing

Fire Sprinkler   **Myself**   **August 2018**
- Displaying information retrieved by sensors (heat & humidity) on an Arduino LCD screen
- Programmed Micro-Controller to act as an intermediary between the sensors and the servo motor

Control System for Water Treatment Plant   **Team Member**   **September 2018 – Present**
- Automate the system to intake data (environmental factors) to adjust the amount of chemicals and water flow time
- Data Entry and Analytics

Encryption/Decryption Data   **Working under Professor**   **September 2018 – Present**
- Using AES256, Hashing, and UTF-8 to encrypt information
- Securing information through computers to pass along "keys" for decryption

Election Security   **Working under Professor**   **September 2018 – Present**
- Using Little-Jil, a visual representation of a programming language, to map out the election process
- Finding faults in the system using computational tools and look for ways of improvement

EXPERIENCE:

UnitedHealth Group   **Internship**   **June 2019 – Aug 2019**
- Build a graph database back-end to incorporate disparate sources of data
- Design a web application used to find valuable insights on call center data to reduce call volume