# Resume

# Changxin (Alan) Liu

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#### **EDUCATION**

## UNIVERSITY OF CONNECTICUT

STORRS, CT

**Major: Computer Science and Engineering** 

2016 - 2020

• GPA: 3.7/4.0

• Graduated On: 05/2020

- Academic Awards/Achievements: Dean's List Engineering, SSS Award, AP Honor Award, HKN
- Relevant coursework: Principles of Databases, Artificial Intelligence, Machine Learning, Operating Systems, Computer Architecture, Software Engineering, Data Structures and Object-Oriented Programming, Electrical Circuits, Principles of Programming, Digital Logic Design, Discrete Systems, Systems Programming, Computer Networks and Data Communication, Algorithms and Complexity, Probabilistic Performance Analysis of Computer System.

# **Minor: Mathematics**

• **Relevant coursework**: Calculus I, Calculus II, Applied Linear Algebra, Multivariable Calculus, Differential Equations, Probability, Physics I, Physics II, Chemistry II.

# MONTVILLE HIGH SCHOOL

OAKDALE, CT

• **GPA: 4.6/5.0**; Class rank: 16/165

2012 - 2016

• Academic Awards/ Achievements: National Honors Society, High Honors, Honor with Extinction, Principal's Award

#### COMPUTER LANGUAGE EXPERIENCE

# Python, C, MATLAB, SQL, C++, Java

## **WORK EXPERIENCE**

Lab Monitor in UConn, Storrs	2019-2020	Storrs, CT
IT Department in UConn, Avery Point	2017-2018	Groton, CT
Starbucks Barista	2016-2017	Groton, CT
China House Restaurant	2013-2016	Quaker Hill, CT

## PROJECT DONE

Senior Design Project with Synchrony: Synchrony proposes to adopt agile to enable discovery, systematic tagging and traceability for software components related to secure practices. Using controlled repositories, this project, Secure Scrum Design, leverages Synchrony's existing CI/CD pipeline to allow security metadata to pass consistently through the pipeline. The project enables this capability by developing OpenAPI specifications across the pipeline elements, starting from the metadata repository and flowing through to executables. In other words, the project enables developers to find tested secure code, include it in their builds, and to trace those security features through the CI/CD pipeline. This capability impacts the following pipeline components.

**Banking System with Database:** Created a durable banking system database and perform transaction between bank accounts with consistency and concurrency control using Python. Users are able to deposit, withdraw, transfer the money and check balance

Machine Learning for Classification and Regression: Created different models using Scikit-Learn and Neural Network that can be used to predict the new dataset. Compare the accuracy and analyze the result between different models. Last, improve the model by tuning the hyperparameter. (Hand writing recognition, house value prediction, classification for Fashion-MNIST) Solve different Optimization problems: Solved Sudoku, Magic series, Cryptarithmetic puzzles using Python OR-tools. Arcade Game Project with Java: Tetris, Space Invader and Snake.

#### ADDITIONAL INFORMATION

- Technical Skills/Tools: Latex, Eclipse, Jira, Confluence, Bitbucket, Git, MS Visual Studio, MySQL, TensorFlow, GitHub.
- Soft Skills: Communication, Teamwork, Flexibility, Problem Solving, Self-management, Time Management.
- Operating System: Windows, Mac OS, Linux.
- Languages: Mandarin Chinese (native), English.
- Interests & Hobbies: Machine Learning, AI, Database, Software Development, VR, Robots, Swimming, Badminton.