# Allen P. Chien

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## **Technical Skills**

Languages C/C++, Python, Java, MATLAB, MASM32, MATLAB, HTML/CSS

Operating Systems MacOS, Windows, Linux, Robot Operating System2

Domain Knowledges Machine Learning (Supervised Learning, Reinforcement Learning, TinyML

Deep learning, Natural Language Processing), Embedded Systems

#### Education

University of Wisconsin - Madison Madison, Wi · 12/2023 - 12/2024

Concentration Computer Science · BS

LaGuardia Community College (CUNY)

Long Island City, NY · 09/2022 - 12/2023

Concentration Computer Science · AS · GPA: 3.9

## **Work Experience**

## L'SPACE NPWEE Academy (NASA), Intern

Remote · 09/2023 - 12/2023

- Wrote a proposal with a team of 14 to compete with other teams for a grant of 10,000\$.
- Researched machine learning methods that analyze satellite data to detect microplastics.

## Hunter College (CUNY), Research Student

New York, NY · 06/2023 - 12/2023

- Conducted research with Dr. Anita Raja in Distributed Artificial Intelligence Research Lab.
- Investigated the problem of credit assignment and communication optimization for Multi-Agent Reinforcement Learning in a variety of scenarios of StarCraft2.

## LaGuardia Community College (CUNY), Tutor

New York, NY · 03/2023 - 12/2023

Tutored and assisted students on developing the skills they need to do well in the courses they
enrolled in. Classes tutored were Advanced C++ Programming, Computer Organization and
Assembly Language Programming.

## LaGuardia Community College (CUNY), Research Student

New York, NY · 11/2022 - 08/2023

- Conducted research with Dr. Praveen Khethavath while being part of the National Institute of Health Bridges, and published a paper to CSDE 2023.
- Performed binary classifications with 10 supervised and deep learning methods.
- Gather 1970 real emails and labeled them by ourselves.
- Extracted 24 features from 16906 emails, including online and real email datasets.

## National Community College Aerospace Scholar (NASA), Intern

Remote · 01/2023 - 06/2023

- Discovered, researched past, present and future missions and programs of Aeronautics Research Mission Directorate.
- Designed and researched a framework plan for lunar exploration.

## **Projects**

#### **Support Vector Machine**, C++, OpenGL

New York, NY · 11/2022 - 08/2023

- Constructed Support Vector Machine model from scratch, and achieved 100% accuracy on linear separable datasets.
- Implemented Sequential Minimize Optimization algorithm that resolved the SVM dual problem.
- Visualized the SVM hyperplane that separates the data points with the OpenGL library.

# **LaGuardia Express Search**, Python (Flask)

New York, NY · 03/2023

- Managed a team of 5 and won the First place at LaGuardiaCC hackathon2023.
- Transcribed the speech input into text as a prompt question using Google Speech API.
- Generate prompts that redirect users to the appropriate school resource using OpenAI API.

## **SVM**, Python (Streamlit)

New York, NY · 03/2023

- Won the First place at Bio x ML hackathon issued by Hugging Face and Lux Capital.
- Fine Tuned LLMs that Generate unified protein embedding across multiple protein modalities.
- Launched and worked on cloud computing services including Runpods and Lambda Cloud.