# 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 System

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

• Collaborated with a dynamic team of 14 members to craft a compelling grant proposal, vying against other teams for a \$10,000 grant.

 Investigated machine learning methods focused on the analysis of satellite data for the purpose of detecting microplastics.

## Hunter College (CUNY), Research Student

New York, NY · 06/2023 - 12/2023

Remote · 09/2023 - 12/2023

- Collaborated closely with Dr. Anita Raja in the Distributed Artificial Intelligence Research Lab, actively contributing to research initiatives.
- Delved into the intricate challenges of credit assignment and communication optimization in Multi-Agent Reinforcement Learning within various StarCraft2 scenarios.

#### LaGuardia Community College (CUNY), Research Student

New York, NY · 11/2022 - 08/2023

- Engaged in impactful research alongside Dr. Praveen Khethavath as a member of the National Institute of Health Bridges, resulting in the publication of a paper in IEEE CSDE 2023.
- Applied comprehensive analysis by conducting binary classifications using ten distinct supervised and deep learning methods.
- Applied advanced data analysis techniques to extract 24 key features from a diverse set of 16,906 emails, encompassing both online and real email datasets.

## **Projects**

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

New York, NY · 11/2022 - 08/2023

- Developed a Support Vector Machine (SVM) model from the ground up, achieving unparalleled success with 100% accuracy on linearly separable datasets.
- Applied the Sequential Minimize Optimization (SMO) algorithm to effectively resolve the SVM dual problem.
- Utilized the OpenGL library to visually represent the SVM hyperplane.

# LaGuardia Express Search, Python (Flask)

New York, NY ·03/2023

- Led and orchestrated a high-performing team of 5, securing the prestigious First Place at the CUNY-LaGuardiaCC Hackathon 2023.
- Applied advanced speech-to-text technology by transcribing speech inputs into prompt questions using the Google Speech API.
- Engineered prompts utilizing the OpenAI API to guide users seamlessly to relevant school resources.

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

New York, NY · 03/2023

- Secured the prestigious First Place at the Bio x ML hackathon hosted by Hugging Face and Lux Capital.
- Executed fine-tuning on Language Models (LLMs), crafting a unified protein embedding across diverse protein modalities.