

Gavin Hung  
7488 Tiptoe Lane  
Cupertino, CA 95014

June 8th, 2020

A4 Bootcamp  
450 Serra Mall  
Stanford, CA 94305

Dear A4 Team,

I am writing in regard to the A4 Machine Learning Internship. I believe that my past experiences in utilizing machine learning, teaching programming, and working as a software team lead make me a good fit for the position.

First, I have used my machine learning skills to create useful applications. In a past hackathon, my team and I created an IOS app that can detect sign language gestures from the user in real time. We trained convolutional neural networks to find hands and classify the sign language character. I have also been learning TensorFlow to create recurrent and convolutional neural networks that can predict data and classify images. I have experience working with Google Colab to write Jupyter Notebooks.

Second, I have independently ran Python and Java coding camps. I developed the curriculum to suit students with varying degrees of experience in coding. When designing coding exercises for the class, I thought about the challenges I faced when I was a beginner programmer and made sure to address the roadblocks I encountered. I enjoy mentoring students and challenging them to approach problems from different perspectives.

Lastly, as a software lead on the school robotics team, I have experience managing a team and overseeing the coding of the robot. I maintain great communication between the hardware and electrical divisions to ensure that deadlines are met before competitions.

I do not have any major commitments until late August and am available to work immediately both in-person in the Bay Area and remotely. I would like to use my skills to help create an educational and fulfilling boot camp for students at A4. Please contact me at 408-674-8660 or at [gavinkhung@gmail.com](mailto:gavinkhung@gmail.com), if you have any further questions. Thank you for your consideration.

Sincerely,  
Gavin Hung

# Gavin Hung

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## Education

**Monta Vista High School**

Rising Junior, GPA 4.0/4.0

Cupertino, California

Expected Graduation in 2022

## Technical Skills

**Languages:** Python, JavaScript, Java, Shell, Dart, HTML, CSS

**Frameworks and Libraries:** Node, React, Flutter, Tensorflow, Pandas, Numpy, Matplotlib, Flask, Docker

**Applications:** Microsoft Office, Google Suite, Adobe XD, Adobe Illustrator

## Relevant Experience

**Monta Vista Robotics Club**

Cupertino, California

*Software Lead*

August 2019 - Present

- Led a group of 5 students to develop code that served as the brain/logic of the robot.
- Created the algorithm that uses computer vision to find targets and auto-align the robot to face the target.
- Programmed the LED lights around the robot and the conveyor belt system.
- Taught at the Head-Start program for 50 hrs to introduce incoming freshmen to how to code a robot.

**Hongyun Art**

Cupertino, California

*Computer Science Python Teacher*

Summer 2019

- Engaged with students in groups and individually to help them apply coding concepts in the Tkinter python library to create artistic applications.
- Taught the fundamentals of programming and the syntax of python.
- Gained experience teaching and communicating complex concepts to students with little to no coding experience.

**Green Apple Education**

Cupertino, California

*Java & Python Teacher*

Winter 2017, Spring 2018

- Independently ran a coding camp for 3-5 students from a range of coding backgrounds.
- Developed a syllabus and curriculum for teaching the fundamentals of both Java and Python, including loops, variables, inputs, arrays, control flow, algorithms, functions, logical operators, and if-else statements.
- Guided students through in-class lab coding assignments and prepared instructional materials for labs.

## Hackathons/Projects

- **Jai Krishi:** (In Development Phase) May 2020–Present
  - Creating an IOS/Android app for farmers to detect crop diseases from images/weather data using Fastai & Flutter.
- **Sigma Hacks:** IOS app to help people with visual impairment Nov 2019
  - Used ML to identify items depicted in video captured by the user in real-time.
  - Used augmented reality to calculate the distance between objects and displayed information to the user.
- **Omni Hacks - 1st Place:** IOS app with Swift that used ML to classify sign language gestures Sept 2019
  - Used two convoluted neural networks using TensorFlow and CoreML.

## Extracurriculars

- **Staff Writer:** Responsible for multi-media aspects of the El Estoque Student Newspaper May 2020–Present
- **Staff Writer:** Researched topics, interviewed teachers, and wrote articles for Res Novae Newspaper Sept 2019–Present
- **Website Master:** Maintained and updated the Monta Vista Robotics Team website Aug 2019–Present
- **Co-founder:** Co-Founded Gen Z Times Podcast, discussing new tech advancements Jun 2019–Present
- **Mentor:** Mentored Pixel Hacks hackathon participants and provided guidance on troubleshooting code Feb 2020
  - Pixel Hacks IV is an all-female high school hackathon that promotes women in STEM.
- **Museum Interpreter:** Volunteered at the Tech Interactive Museum for 115 hrs Nov 2018–Dec 2019
  - Ran labs and communicated technical concepts in cybersecurity, robotics, and physics to museum visitors.

## Leadership

- **Director of Technology** for the Monta Vista TedX Club May 2020–Present
- **Secretary** for the Monta Vista Astronomy and Astrophysics Club May 2020–Present
- **Director of Technology** for Byte Hacks Online Hackathon Nov 2019–Present