# **TYLER LABONTE**

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### **EDUCATION**

## University of Southern California, Viterbi School of Engineering

Los Angeles, CA Expected May 2021

Bachelor of Science, Computer Science and Business Administration Minor in Statistics

USC Trustee Scholarship (top 2% of USC Class of 2021)

• USC Viterbi Fellowship (top 6% of Viterbi Class of 2021)

## Mililani High School

Mililani, HI

• National Merit Scholar (top 0.47% of PSAT takers)

High School GPA: 4.16

National AP Scholar (average score of 4.9 on 8 AP exams, including AP CS and AP Physics C)

#### **SKILLS**

Languages: Proficient in Java, Experience in C/C++ and Python, Familiar with HTML/CSS

Software: Autodesk AutoCAD and Inventor, Eclipse, Microsoft Visual Studio, Github, Sublime Text, Python IDLE

### **EXPERIENCE**

**University of Southern California Integrated Media System Center (USC IMSC)** 

Los Angeles, CA

Research Assistant

September 2017 - Present

## Mililani High School VEX Robotics

Mililani, HI

Lead Programmer

August 2015 - May 2017

- Achieved 1st place in two consecutive years at SkillsUSA Hawaii Mobile Robotics, 2nd place at the international Pan-Pacific Championships, and 1st place at the Hawaii State Championships, qualifying our team for Worlds.
- Utilized Autodesk AutoCAD and Inventor to streamline the prototyping process, leading to an Innovate Award for original and progressive integration of shooter and intake subsystems.
- Used C to develop autonomous robot code for subsystems such as drivetrain, arm, and claw/shooter.
  - o Developed optimization algorithms such as take-back-half (TBH) and proportion-integral-derivative (PID).
- Mentored three underclassmen in programming and electrical systems throughout the robotics season.

## **PROJECTS**

### USCalendar

TrojanHacks Hackathon, University of Southern California September 2017

Honorable Mention

- Applied Javascript to program an automatic push notification system for our course tracking website.
- Used HTML/CSS to code website front-end and navigation.
- Coordinated Git workflow to increase productivity for our four team members.

**Final Frontier** 

February 2017 - April 2017

• Applied Java to build a space-exploration and trading game with an ASCII GUI and object-oriented architecture.

**MIT Battlecode** 

January 2017

• Utilized Java to engineer an autonomous bot and compete in MIT's annual AI competition, winning 50% of our matches and advancing to the qualifying round despite competing against college and graduate students.

#### **LEADERSHIP**

State President

SkillsUSA Hawaii

Oahu, HI

August 2016 - May 2017

- Led state officers from four organizations in planning annual statewide conference with thousands of attendees.
- Implemented recruitment initiatives such as SkillsUSA Outreach Services, increasing school membership by 20%.
- Managed four delegates' meetings to distribute information and vote on new policy, and led three statewide community service events to increase SkillsUSA's impact on local elementary and middle schools.

## **Japan International Karate Center**

Oahu, HI

Assistant Instructor

August 2013 - May 2017

- Earned my third-degree black belt after 12 years of training, along with the Sensei Clarice Tsuchiya Spirit Award.
- Taught up to 40 students from ages 5-80 for six hours per week, at both our headquarters and a satellite dojo.
- Earned five medals at the USA Karate National Championships, including a gold medal in Advanced Kata.