TYLER LABONTE

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EDUCATION

University of Southern California, Viterbi School of Engineering   **Los Angeles, CA**
Bachelor of Science, Computer Science and Business Administration   **Expected May 2021**
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: Java, Python, C/C++, HTML/CSS, Javascript
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**
- Used Python to program machine learning algorithms to predict success rates of liver transplants.

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.
  - 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

Compute   **October 2017 - November 2017**
- Used Javascript to program an incremental game whose progression is governed by a series of exponential functions.
  - Developed a method to gather efficiency data from webapp and export to a spreadsheet for analysis.

USCalendar   **TrojanHacks Hackathon, University of Southern California**
Honorable Mention   **September 2017**
- Applied Javascript to program an automatic push notification system for our course tracking website.
- 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

SkillsUSA Hawaii   **Oahu, HI**
State President   **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%.

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.