

Lawrence Tseng

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EDUCATION

University of Massachusetts Amherst, Amherst, MA

2019 - EXPECTED 2023, GPA: 3.94

Bachelor of Science in Computer Science

College of Information and Computer Sciences

Bachelor of Business Administration in Management

Isenberg School of Management

Organizations: UMass ACM, Cybersecurity Club, Entrepreneurship Club

EXPERIENCE

Savant Systems, Hyannis, MA — Software Engineering Intern

JUNE 2019 - AUGUST 2019

- Redesigned UI elements for an iOS application to conform to a consistent, company-enforced design language, matching its Android counterpart
- Introduced a Swift library to replace conflicting sizing and layout constraints to create a better user experience for iPads in different multitasking modes
- Designed Arduino-based solutions using relays and sensors for in-house projects to automate repetitive, mundane tasks

ClearMotion, Woburn, MA — Software Engineering Intern

JUNE 2018 - AUGUST 2018

- Produced MATLAB and Python scripts for translating vehicle signals into a comprehensible format for other stakeholders to further the software development of the active suspension product
- Designed an iPhone app using Swift for collecting, graphing, and analyzing accelerometer data to determine the feasibility of an unreleased project
- Followed an Agile-Waterfall hybrid model for project management with daily standup meetings and rigorous, monthly task planning to ensure internal deadlines were met

Secure AI Labs, Cambridge, MA — Software Development Intern

DECEMBER 2017 - JUNE 2018

- Developed a front-end distributed application with React to streamline the user experience for an MIT-backed biotech startup (formerly GeneTank) to create a security-focused service for sharing genetic and health data
- Collaborated with team members remotely by maintaining active Slack communications, emails, and weekly phone calls, synchronizing updates regarding the application's security protocols, user interfaces, and milestones
- Published an academic paper submitted for an IEEE conference, introducing the product as a solution to tackling present-day issues with sharing genetic information

Westwood Robotics, Westwood, MA — President

SEPTEMBER 2017 - JUNE 2019

- Founded a 501(c)(3) non-profit organization to create STEM programs in local communities to strengthen the engagement of K-12 students through robotics
- Employed new channels of marketing and outreach programs, achieving a 25% increase in sponsorship and a 15% increase in donations through efficient leadership and tactical planning
- Administered and deployed GSuite (Google) web services and Slack across the organization to streamline emails and documents for more efficient conversations, minimizing downtime and frustration for team members

github.com/LTSENG01

[linkedin.com/in/LTSENG01](https://www.linkedin.com/in/LTSENG01)

SKILLS

Languages: Swift, JavaScript, HTML5, CSS, Python, Arduino C, Java, MySQL, and MATLAB

Tools / Platforms: Git, Terminal, iOS, watchOS, macOS, Robotics, UNIX/Linux, Windows, Arduino, Photoshop, Illustrator

Frameworks: Bootstrap, Django, React

PROJECTS

FIRST® Robotics Competition Robot Code (2016, 2017, 2018, 2019)

git.io/Je3SR

- Ultrasonic sensors, Computer Vision, IMUs, PID feedback, and UI controller
- Lead programmer and architect of Java, Python, and Web projects

Electric Skateboard (2017)

git.io/Je3SI

- Built an electric drivetrain with safety mechanisms for a skateboard
- Created an iOS (bluetooth) controller that took gyro inputs from the user and communicated with an on-board Arduino

Website for Westwood Robotics (2017)

whsrobotics.org — Dynamic content, custom design, and a payment portal

Website for US STEAM Academy (2016)

ussteam.org (down) — MySQL and Bootstrap

Website for Westwood Detailz (2019)

westwooddetailz.com — Online Store

AWARDS/PUBLICATIONS/MISC

Dale Carnegie Course Leadership Training

FIRST® Dean's List Finalist (2018)

President's Volunteer Service Award

(2014, 2015, 2016, 2017, 2018)

Kim, A., [and 12 others, including Tseng, L.] (2018) "Genie: A Secure, Transparent Sharing and Services Platform for Genetic and Health Data." [arXiv:1811.01431](https://arxiv.org/abs/1811.01431) [cs.CR]