Lawrence Tseng

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⊘ https://ltseng.me • ⌗ github.com/LTSENG01 • 🔗 linkedin.com/in/LTSENG01

Education

University of Massachusetts Amherst, Amherst, MA — **GPA: 3.97**   *EXPECTED GRADUATION 2023*

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, CICS Careers (Career Developer), Cybersecurity Club (Treasurer)
Coursework: Data Structures, Algorithms, Discrete Math., Operating Systems, Calc. I–III, Lin. Algebra, Statistics, Economics, Accounting, Management, Marketing, Business Info. Systems

Skills

Languages & Tools: JavaScript, Python, Swift, HTML5, CSS, C, Java, MySQL, MATLAB, Git, Photoshop, Illustrator
Platforms & Frameworks: iOS, REST, Bootstrap, NodeJS, Express, React, Arduino, macOS, UNIX, Agile, Jira

Experience

Savant Systems, Hyannis, MA — Software Engineering Intern   *SUMMER 2019, 2020*

- Developed a scalable Python/web framework to automate manufacturing quality control tests for the "Multistat" thermostat lineup, cutting the required time by 8 minutes/unit (80% reduction) and increasing the production throughput by 500% with an intuitive user interface and streamlined procedure
- Redesigned UI elements for an iOS application to conform to a consistent, cross-platform, corporate design
- Introduced a Swift library to replace conflicting layout constraints which improved the user experience on iPads

ClearMotion, Woburn, MA — Software Engineering Intern   *SUMMER 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 sensor data to research correlations between smartphone sensors and pre-existing calibrated measurements
- Followed an Agile-Waterfall hybrid model for project management with daily standup meetings and rigorous monthly task planning to ensure internal deadlines were met

Westwood Robotics, Westwood, MA — President   *SEPT. 2017–JUNE 2019*

- Founded a 501(c)(3) organization to create local robotics programs to engage K-12 students in STEM, establishing non-profit bylaws and articles of organization with the Commonwealth of Massachusetts
- Employed new channels of marketing and outreach programs, achieving a 25% increase in sponsorship and a 15% increase in donations from live demonstrations, social media posts, and email campaigns
- Administered and deployed GSuite (Google) services and Slack to streamline emails and documents

Projects

Website Portfolio (2020)   https://ltseng.me/portfolio

- Integrated a URL routing and resource server into my website using Express and NodeJS to collect basic user session information and simplify external links

FIRST ® **Robotics Competition Robot** (2016–2019)   https://ltseng.me/robotcode

- Assembled ultrasonic sensors, IMUs, PID controllers, and Computer Vision routines for robot self-navigation
- Designed a responsive website with dynamic blog posts to showcase community efforts

Awards and Publications

UMass Cybersecurity CTF — Winner (2020), ***FIRST*** ® **Dean's List Finalist** (2018), **President's Volunteer Service Award** (2014–2018)

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://ltseng.me/genie)