MARTIN ESTRIN

mzestrin@usc.edu | (206) 572-9714 | www.linkedin.com/in/martinestrin | https://github.com/martyzevy

EDUCATION

University of Southern California, Viterbi School of Engineering *Los Angeles, CA*
Bachelor of Science in Computer Science May 2026
Honors: 2023 Hoffman Family Scholar GPA: 3.91
Relevant Coursework: Data Structures and Object-Oriented Design, LeetCode Data Structures & Algorithms Crash Course, Accelerated Programming in Python

PROFESSIONAL EXPERIENCE

Morpheus Space El Segundo, CA
Undergraduate Finance and Development Intern August 2022–December 2022

- Analyzed revenues, expenditures and business needs using Excel, ensuring timely development of annual budget
- Accurately beta-tested software with high attention to detail, identifying key errors in the user interface, allowing for the swift deployment of software

PROJECTS

RSA Encryption and Decryption System October 2023

- Implemented public encryption and private decryption algorithm in C++, achieving a robust security infrastructure for sensitive data transmission, as measured by successful encryption and decryption of 1024-bit keys, by utilizing modular exponentiation and the extended Euclidean algorithm.
- Ensured data integrity and confidentiality for critical information exchanges, as evidenced by successful encryption and decryption of various file types, by using principles of the RSA algorithm and modular arithmetic.

Doublet Game October 2023

- Designed and implemented a custom priority queue ADT using a templated d-ary heap structure, mirroring the functionality of std::priority_queue, demonstrating strong understanding of data structure design and efficient heap management techniques for optimized performance
- Applied the custom priority queue in an A* search algorithm to solve the Doublet game, showcasing adept application of data structures in a real-world scenario and highlighting problem-solving abilities through the effective implementation of pathfinding algorithms

INVOLVEMENT & LEADERSHIP

USC Association for Computing Machinery Los Angeles, CA
General Member August 2023–Present

- Actively engage in monthly programming competitions alongside experienced mentors, refining proficiency in data structures and algorithms and fostering a deeper understanding of complex coding challenges
- Enhanced expertise in version control, virtual machines, and containers through active participation in weekly workshops, alongside attending insightful panels featuring industry specialists, showcasing a comprehensive grasp of crucial technical tools and practices

USC TAMID Los Angeles, CA
Director of Education December 2022-Present

- Lecture to cohort of 20 members on a weekly basis, teaching fundamentals of programming, marketing and finance - developing communication skills and fostering continued competency amongst club members

SKILLS

Skills: C++, C#, Python (NumPy, Pandas), Java, Swift, MySQL, HTML, CSS, JavaScript, R, Git, Linux, Docker