Saul Lopez Lucas

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EDUCATION

BROWN UNIVERSITY, GPA: 3.67 PROVIDENCE, RI

COMPUTER ENGINEERING, BACHELOR Of SCIENCE *EXPECTED GRADUATION DATE–MAY 2025*

- Relevant Coursework: Program Design: Data Structures & Algorithms, Digital Computing Systems, Digital Electronics System Design, Electrical Circuits & Signals, Electricity & Magnetism, Dynamics & Vibrations, Statics

SKILLS

- Programming Languages: Python, Java, C, Swift, HTML, CSS, MATLAB
- Software: Visual Studio Code, IntelliJ IDEA, Sublime Text, Jupyter, Xcode, Fusion360, Siemens NX, Rhinoceros 3D, Adobe Illustrator, Adobe InDesign, Adobe Photoshop

WORK EXPERIENCE

KPMG PHILADELPHIA, PENNSYLVANIA

EMBAR SCHOLAR INTERN–IT/ENGINEERING *JUNE 2023–AUGUST 2023*

- Engaged in KPMG's advisory, tax, and audit services by shadowing professionals, participating in internal practice development workshops, reviewing client onboarding processes and information, and receiving technical training in data analytics, storytelling, and visualization
- Gained exposure and training in cybersecurity in areas such as data privacy, network attacks, access control technologies, system and computer architecture, cryptography, and software development security. Utilized acquired skills and knowledge to lead a group of five in solving a real-world case study for a KPMG client

SOCIETY OF HISPANIC PROFESSIONAL ENGINEERS PROVIDENCE, RI

EVENT FACILITATOR *SEPTEMBER 2021–PRESENT*

- Facilitated 22 sold-out Noche de Ciencias events to promote awareness of STEM fields and careers to K-12 students through kit-building activities and panelist speaking sessions. Impacted more than 2,369 students and personally interacted with over 553 students

TECHNICAL PROJECTS

SEARCH ENGINE

- Created a search engine with Python using indexing and querying with the PageRank algorithm created by Google to prioritize search results based on relevance
- Designed with a strong emphasis on time and space efficiency–considered Big-O space complexity of data structures in design approach and ran XML files of different sizes through program to optimize code as needed

DECISION TREE

- Built a machine learning algorithm with Java that uses training data to create a decision tree that makes predictions about situations given new data
- Tested to meet accuracy threshold of 70% by performing various unit tests and system tests, where each datum in the testing dataset had its real value compared to the generated decision tree's prediction. Surpassed this by reaching an 85% accuracy rating

SKETCHY

- Developed a desktop application from scratch using Java and JavaFX to allow users to free draw with their mouse cursor, create and manipulate shapes, undo and redo their actions, and save and load their drawings
- Utilized data structures like arrays and stacks to achieve functionality like lowering and raising shapes over one another and file I/O to convert information about a user's drawing into file format to be saved or loaded onto the application

LEADERSHIP & PROFESSIONAL DEVELOPMENT

MANAGEMENT LEADERSHIP FOR TOMORROW PROVIDENCE, RI

CAREER PREP FELLOW *JANUARY 2023–PRESENT*

- Accepted into a selective 18-month professional development program for high-achieving diverse students. Attended conferences hosted by LinkedIn and Deloitte to gain insight into the latest innovations in technology and skills crucial to succeed in the industry. Participated in workshops and mock interviews to sharpen leadership, interpersonal, and technical problem-solving skills

NASA L'SPACE PROGRAM PROVIDENCE, RI

MISSION CONCEPT ACADEMY PARTICIPANT FEBRUARY 2023–*MAY 2023*

- Organized and led a team of 8 in creating a 120-page preliminary design review (PDR) for a theoretical surface lander mission to Mars, with the intent of collecting data on volatiles, dust, and energy fluxes in Mars' Northern Polar Regions. Through effective communication, coordination and delegation of tasks, team's PDR ranked among the top three for the entire program

CODEPATH–iOS MOBILE DEVELOPMENT PROVIDENCE, RI

COHORT PARTICIPANT *SEPTEMBER 2022–NOVEMBER 2022*

- Participated in weekly cohort sessions focused on iOS mobile development followed by hours of intense, project-oriented training through both individual and group exercises. Completed a total of three projects made from scratch using Swift, encompassing tasks such as wireframing for application layout design, API implementation, and database utilization