Gilberto Guadiana

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EDUCATION

Northwestern University, Evanston IL
Bachelor of Science in ***Mechanical Engineering*** June 2022
Master of Science in ***Computer Science*** June 2022
Cumulative GPA: **3.67/4.00**
Honors: Questbridge Match Scholar, The Gates Scholarship Scholar, Greer Scholar
Coursework: Operating Systems, Algorithm Design, Computer Systems, Advanced Mechatronics, Robotic Manipulation, AI Programming, Creative Machine Learning, Data Privacy, Generative Methods

EXPERIENCE

Digital Insight Games (DIG)
Software Engineering Intern, Remote September 2022 - November 2022
- Configured Avalanche network for upcoming game release for 10k+ players to own game assets
- Prepared Solidity smart contracts for a security audit by designing, peer reviewing, writing JavaScript unit tests, and working with leadership and external auditors for an exploitable resistant MVP
- Forged 5 tech partnerships to best allow DIG to pursue user friendly cryptocurrency practices

Blockchain Group, *University Club*
Software Consultant, Evanston, Illinois May 2019 - February 2022
- Researched industries to identify solutions to pain points and attract client projects
- Designed and prototyped blockchain systems for clients including IBM and the University of Iceland
- Trained junior consultants and project managers to grow from 6 to 25 team members

McCormick Summer Research Fellowship, *Mentored by CS Prof. Kate Compton*
Software Engineer**,** Remote June 2021 - September 2021
- Developed an app for artists to create and manage turn-by-turn NFT art collaborations with built-in ownership, royalty, and business logic with React and Web3 API calls using Solidity, JS, Python
- Tested software for bugs with unit testing, user tests, and post-mortems in Agile environment

TU Dortmund University, *Mentored by Tan Gurpinar, Enterprise Logistics Chair*
Supply Chain Researcher, Remote June 2020 - September 2020
- Analyzed blockchain-based supply chain management systems through a systematic literature review
- Developed an enterprise tool for choosing a blockchain platform based on system needs and usage

PROJECTS

Brownian Motion Simulator (Senior Capstone), *Project Manager* January 2022 - June 2022
- Managed a team of six in building a shaking table to generate Brownian Motion for studying molecular bond breakage behavior with documentation and presentation of the design process
- Coded a tracking system using computer vision and statistical tests for validation and benchmarking

PIC32 Microcontroller PCB, Communication, and Customization (Mechatronics) April 2022 - May 2022
- Designed a PCB for the PIC32 with USB to UART converter, voltage regulator, and SNAP programmer
- Programmed the PIC32 for sine and triangle wave generation using SPI communication and a DAC

Mobile Manipulation of KUKA youBot (Robotic Engineering) October 2021 - December 2021
- Used odometry, reference trajectory generation, and feedback control to program the KUKA youBot to move a block to a desired location using MATLAB with simulations in CoppeliaSim

ACTIVITIES

Member, **Northwestern Track Club** July 2018 - June 2022
Committee Member, **Academic Committee for Slivka Residential College** March 2019 - March 2022
First Year Peer Mentor, **SES Compass Mentorship Program** June 2020 - May 2021

SKILLS

Language: Adept reading, writing, and speaking in Spanish.
Computer: Functional in MATLAB, JS, Python, C, C++, Lisp, NX CAD, Ansys, MPLAB, MS Office, Git, Solidity.