Antonio Karam

Driven and skilled computer engineering student interested in developing innovative solutions.
+1 (574) 621 1852 | antonio.c.karam@gmail.com | linkedin.com/in/antonio-karam | antoniokaram.com

EDUCATION

University of Notre Dame | Notre Dame, IN   Expected May 2025
*Bachelor of Science, **Dean's List All Semesters**, IEEE Eta Kappa Nu, Tau Beta Pi*   ***GPA: 3.96***
Major: Computer Engineering | Minor: Engineering Corporate Practice | Concentration: Cyber Security

EXPERIENCE

University of Notre Dame | Notre Dame, IN
Software Engineering Intern   May 2023 – Present
- Developed a **full stack** web application using a **custom framework** that provides faculty and students, access to over 20 data storage and management technologies that can fit all needs and **information security** constraints.
- Upgraded 10 **Ruby** and **Rails** applications to ensure **software security** and created unit tests with documentation.
- Conducted **design thinking** interviews with 8 stakeholders to develop integrated student experience software.

OneAmerica Financial Partners | Indianapolis, IN
AnalytiXIN Software & Data Engineering Intern   May 2022 – Aug 2022
- Built a tool for analysts and brokers to identify characteristics that make insurance plans profitable in **Python**.
- Applied data processing techniques, machine learning, and visualizations to over 1,000,000 real-world data points with **ArcGIS**, **SVM** for **NLP**, preprocessing, **Pandas**, and **Tableau** while navigating **SQL** relational databases.

LEADERSHIP AND ACTIVITIES

Engineers Without Borders | Notre Dame, IN
Chapter Vice President – Chapter Treasurer – Past Projects, Team Lead   Sep 2021 – Present
- Spearhead design and brainstorm sessions with over 50 members to make go/no-go decisions on projects.
- Consolidated Monitoring & Evaluation processes to guide the team through tests and assessment data analysis.
- Budgeted the chapter's resources, raising $10,000 in capital for implementation and assessment trips to Ecuador.

Student International Business Council | Seattle, WA - Chicago, IL
Microsoft Travel Team   Jan 2023 – Apr 2023
- Explored opportunities within the embedded finance industry through in-depth market and technical analyses.
- Engineered a model Buy Now Pay Later interface within the Xbox store that increases buyer conversion by 65%.
PricewaterhouseCoopers (PwC) Travel Team
- Advised a big box retailer after a **cyber security** breach by assembling 8 recommendations across the company's executive structure relating to social engineering, data security, privilege escalation, and network segmentation.

RELATED COURSEWORK AND PROJECTS

Digital Integrated Circuits | University of Notre Dame
Chip Design   August 2023 – Present
- Designed standard cells in 0.5u technology which met lambda design rules and passed DRC, LVS, and extraction tests using Cadence Virtuoso, Layout GXL, and Analog Place and Route.
- Synthesized a MIPS 8-bit microprocessor using Genus Synthesis Solution and Innovus Implementation System.
- Proposed, designed, and tested an LFSR in Verilog and synthesized the design using the eFabless digital chipIgnite flow in GF180nm technology, passing Multi-Project Wafer and Tapeout tests.

Dunne Hall Website | University of Notre Dame
Full Stack Developer   May 2022 – Present
- Upgraded the **dunnehall.com** website promoting Dunne Hall's community values. Reduced load times by 96%.

TECHNICAL AND LANGUAGE SKILLS

Technical: C, C++, Python, Java, Git, Dart, Ruby, HTML, CSS, JavaScript, React, TypeScript, Next.js, Bootstrap, Tailwind, Firebase, Docker, AWS, SQL, MATLAB, Bash, Assembly, Verilog | Tableau, Adobe Suite, Figma
Language: English – Near Native, Arabic – Native Speaker, French – Native Speaker