Nicholas Callen

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EDUCATION

University of California Los Angeles (UCLA)   Los Angeles, California
Bachelor of Science in Computer Science, Minor in Data Science Engineering   *September 2021 – June 2025*
- Data Structures & Algorithms, Software Construction, Time Complexity, Logic/Design of Digital Systems, Discrete Structures, Differential & Integral Calculus, Operating Systems, Machine Learning, Artificial Intelligence, Statistics

EXPERIENCE

Machine Learning Research Assistant   Expected Apr 2024 – June 2024
UCLA VAST Laboratory   *Los Angeles, CA*
- Develop Python programs integrating diverse ML sampling techniques to enhance FPGA optimization workflows
- Train & evaluate ML algorithms on new sampling data and assess performance to improve development processes
- Advance FPGA architecture optimization by leveraging features of the Merlin Compiler and Vitis HLS tools

Data Scientist   June 2023 – Present
BB Graham & Co.   *Orange, CA*
- Leveraged data analysis techniques and statistical models to extract actionable insights, providing senior managers with necessary figures to make strategic decisions
- Revamped data management & streamlined storage/retrieval methods to significantly boost operational efficiency
- Conducted industry research & established a database offering tailored insights resulting in new customer prospects

PROJECTS

BruinBook | *React, Node.js, MongoDB, Git, Javascript, CSS*
- Spearheaded a team of 5 by architecting a web app providing recipes that are accessible and diverse
- Utilized Node.js and Javascript to build dynamic features: Preference Tracking, Searching, User Data
- Engineered backend connection to both MongoDB and frontend, allowing real time storing and syncing of data
- Managed version control on GitHub and merged local projects into one to maintain uniformity
- Conducted user analysis, determined technologies, produced detailed weekly documentation on project progress

Sway | *React, Python (Flask), CSS, PostgreSQL, Git, Docker*
- Led a team of 3 in the development of a company website aimed at expanding market visibility
- Implemented vital features; secure payment processing, calendar integration, and dynamic form support
- Generated $6000 in sales and secured more than 15 clients, highlighting site scalability

Pawperty Project Lead | *C#, Unity, WebGL*
- Collaborated with a cross-functional team to gather valuable feedback and iteratively enhance game design
- Implemented player-facing features, character control, AI behavior, and UI/UX informed by user feedback
- Integral in the planning, brainstorming, and end-to-end implementation process of two games using C# and Unity

BrokerScan | *Python (Selenium, Pandas)*
- Exceeded project expectations by automating data collection, which attracted 5 new clients and facilitated more dynamic and responsive outreach strategies
- Automated repetitive data collection tasks, freeing up approximately 100 hours of analyst time annually

Ocean Commotion | *Javascript, WebGL*
- Coordinated with a team of 3 to lead implementation processes, developed back-end collision detection & spawning
- Oversaw each stage of development, leveraging unit testing to identify and rectify bugs and loopholes

TECHNICAL SKILLS

Languages: Python, Java, C, C++, C#, SQL (Postgres), JavaScript, HTML/CSS, R
Frameworks: React, Node.js, Agile(Scrum), WordPress, Unity, Flask
Developer Tools: Git/GitHub/GitLab, Docker, Verilog, VS Code, Mongo, Linux/Unix Systems
Libraries: PyTorch, TensorFlow, Scikit-learn, Selenium, pandas, NumPy, SciPy, Matplotlib
Skills: Unit and Functional Testing, Agile Development, SDLC, Data Modeling, Debugging, Networks, Excel, Technical Documentation, Teamwork and Communication Skills, Version Control, Object-Oriented Design, REST APIs