SALVADOR BUENADICHA CALVO

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EDUCATION

Virginia Tech, Bachelor of Science in Computer Science, Minor in Math **Aug 2021 — May 2025**

- GPA: 3.9/4.0 (Department Rank 6 of 204)
- John L. Pratt Scholarship Recipient
- Honors College Norrine Bailey Spencer Strong Start Award Recipient

Courses: Software Design, Datastructures & Algorithms, Computer Organization, Multivariable Calculus, Discrete Math, Linear Algebra, Combinatorics

TECHNICAL SKILLS

- **Programming Languages:** Java, C/C++, Python, x86, RISC-V, HTML/CSS/JS, C#, MATLAB
- **Tools/Tech:** Git, Docker, MongoDB, Bash, REST, VS Code, Neovim, Linux
- **Frameworks:** NumPy, Pandas, Spring Boot, Django, .NET, Tailwind CSS
- **Languages:** Fluent in English & Spanish

EXPERIENCE

Computer Science AI Training, Scale AI **May 2023 — Jul 2023**

Reinforcement learning/reward modeling for customer large language models

- Developed prompts for experimental models and evaluated them for correctness
- Reviewed Computer Science related technical prompts and provided feedback

Technologies: Python, JavaScript, DataCompute

Summer Technology Intern, ONCE Foundation **Jun 2022 — Jul 2022**

Worked alongside the quality assurance and robotics team

- Conducted comprehensive accessibility assessments for https://ga11y.fundaciononce.es/
- Created a Python API interfacing from my custom C++ wrapped eye-tracking engine
- Developed a Selenium-integrated browser to spotlight HTML elements utilizing eye-tracking data

Technologies: C++, Python, Selenium, Windows API, HTML, JavaScript

Volunteer Math Instructor, Glasswing International **Jun 2020 — Nov 2020**

Virtual volunteer for an underprivileged school district in El Salvador, worked under Glasswing nonprofit

- Assisted middle school equivalent students in El Salvador with homework
- Recorded several math lectures for topics that students struggled with

PROJECTS

Course Curve | *Java, Spring Boot, MongoDB, React JS*

- Constructed a course registration tool, streamlining students' search for optimal course offerings
- Deployed a REST API using Spring Boot to dynamically rank class sections.
- Stored web-scraped professor ratings and university metrics in a MongoDB database for rapid retrieval
- Crafted a dynamic frontend interface using React JS, enhanced with Bootstrap CSS

QuickRead | *C, Linux API*

- Developed a high-speed, multithreaded pattern searcher for handling large databases and text files exceeding 20+ GB
- Leveraged memory mapping (mmap) for optimized memory consumption and implemented the Boyer-Moore algorithm to accelerate pattern matching.
- Designed an intuitive terminal UI using ncurses to showcase search results

Browser Eye Tracker | *Python, C++, Tobii Engine, Windows API*

- Leveraged Windows API (C++) to get data from eye tracking engine and created a Python usable DLL
- Used Python and Selenium to have a programmable browser
- Integrated Python program with DLL to outline HTML elements looked at and select them by blinking