

# Penn Bauman

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## Professional Experience

**Undergraduate Research Assistant** May 2021 - August 2022

*Behavioral and Environmental Sensing and Intervention for Cancer (besic.org)*  
Developed and maintained a sensor system to monitor cancer patient pain as part of a \$4 million dollar NHS research grant with the UVA nursing school. Orchestrated redesign of setup process for project's Raspberry Pi based sensor packs, achieving full automation of driver installation, device configuration, and management API connection.

**Undergraduate Teaching Assistant** September 2020 - May 2021

*CS 2150: Program and Data Representation*  
Provided office hours to support students learning C/C++ programming and data structures. Developed own ability to read, understand, and debug other's code.

**Digital Products Associate, Independent Contractor** June - August 2018, 2019

*Green America (greenamerica.org)*  
Deployed user friendly database searching including Google Maps integration and modernized layouts for site built with Drupal content management system.

## Education

**University of Virginia** (GPA: 3.7) 2018 - 2022

*Bachelor of Science in Computer Science; Minor in Physics*  
Course Work Included: Data Structures, Algorithms, Software Engineering, Computer Architecture, Operating Systems, Networks, Compilers, Linear Algebra, Differential Equations, Probability, Modern Physics, Classical Mechanics

## Skills

**Linux System Administration:** Deep knowledge of Linux systems, including server management and configurations as well as containerization and networking.

**Public Speaking:** Ability to engagingly articulate ideas both in person and through digital mediums.

**Languages & Technologies:** C/C++, Rust, Go, Python, Django, Flask, Java, PHP, SQL, HTML, CSS, Sass, Bootstrap, Javascript, Typescript, Node, React, Docker, Drupal, Linux, Bash, LaTeX

## Projects (github.com/pennbauman)

**IBCM Executor:** C, C++, Rust, & Go 2020 - 2022

A custom executor for the Itty Bitty Computing Machine, used at UVA to introduce concepts of machine code. Designed to provide extensive debugging and logging options, not available in reference executor.

**Terafirma:** Rust 2022

A static site generator designed to be as flexible as possible with only a single configuration file along with its template files.