

Kwasi Buansi

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Personal Github: <https://github.com/KwBuansi>

School Project Archive: <https://github.com/KwBuansi/Old-Projects/tree/main>

EDUCATION

Davidson College

Bachelor of Science in Computer Science, Minor in Data Science

Davidson, NC

May 2027

- GPA: 3.8
- Coursework: Data Structures, Software Development, Data Visualization, Computer Organization, Database Systems

WORK EXPERIENCE/RESEARCH

Davidson College CS & Mathematics Department | Undergraduate Software Engineer & Researcher Davidson, North Carolina

Intern

May–August 2026

- Engineered JITVis, an interactive developer tool designed to optimize the debugging pipeline for Google Chrome's V8 Just-In-Time (JIT) compiler infrastructure.
- Architected readable data visualization layouts using research-backed graph principles, successfully transforming dense, unreadable compiler Intermediate Representation (IR) graphs and force-directed layouts into high-fidelity interactive views.
- Designed and integrated frontend components, including a Heatmap View to track compilation suspiciousness, a Dual View for phase comparisons, and linked navigation pipelines using JavaScript/D3.js to streamline compiler engineer workflows.
- Conducted technical UX stakeholder interviews with core Google V8 engineers to evaluate the tool, aligning JITVis contributions directly with existing industry-standard workflows at Google.

Startery | Startery Launchpad

Durham, North Carolina

Intern

May–June 2025

- Collaborated with a startup team to engineer an interactive MVP seating app utilizing HTML and CSS to optimize user layout aesthetics.
- Practiced Agile methodologies to accelerate prototyping workflows and facilitate cross-functional product goals.

PROJECTS

[Student Hub](#)

Davidson, NC, February – May 2025

- Built a social media App using Supabase with React, which serves as a discussion board for Davidson College's clubs, events, and courses.
- Interacted with stakeholders to optimize product goals and facilitate communication.
- Worked in a team of 4 as a developer and a Product Owner using the Agile Scrum framework.

[Unix Shell](#)

Davidson, NC, April 2026

- Built a functioning compiler in C to parse user-inputted commands into executable architecture.
- Implemented efficient memory storage, designed tokenization pipelines and engineered syntax routing protocols.

[DataViz-Starbucks Traffic by Locale](#)

Davidson NC, January - May 2026

- Developed an interactive radial chart using d3.js following WCAG accessibility guidelines
- Worked with a python data filtering pipeline to optimize and structure over a million data entries.
- Coded full keyboard and tab navigation, a responsive mobile viewport, and screenreader support.

[Database Design & Querying](#)

Davidson, NC, March 2026

- Employed relational algebra to design complex joins, queries, and functions to implement optimal data retrieval pipelines.
- Designed entity-relationship diagrams (ERDs) to structure optimal database schemas and reduce data redundancy.

SKILLS

- **Languages:** Python, C, SQL, Java, HTML, CSS, JavaScript, Kotlin
- **Tools/Topics:** GitHub, Supabase, Figma, D3.js, Cursor, Graph Visualization, Compiler Architecture, User Research (UX)