Benjamin Thomas

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Education

University of Michigan   **Ann Arbor, MI**

Bachelor of Science in Computer Science & Classical Archeology   August 2021 - May 2025

- EV & Mobility Scholar
- Central Student Government Representative
- Relevant Courses: Intro Programming, Data Structures and Algorithms, Discrete Mathematics, Computer Science Foundations, Computer Organization, Web Systems

Area Archeologica di Poggio del Molino   **Livorno, Italy**

Study abroad coursework, practicum in field archeology   June 2022 - July 2022

- Skills: Total station surveying, QGIS, photogrammetry, ceramic preservation, archeological data collection

Experience

Rocket Central   **Detroit, MI**

Technology Intern   May 2023 - August 2023

- Added functionality to integrations facilitating peer-to-peer feedback - implemented support for feedback approval parameters and categories by producing new XML Schema and XSLT filtering.
- Prevented injection attacks by engineering Java Studio plugins cleansing malicious integration inputs.
- Identified regular accounting discrepancies of over $50,000 by heading data-driven research efforts.
- Facilitated data-informed sprint planning by creating a team analytics dashboard with Power BI and Azure DevOps.

University of Michigan   **Ann Arbor, MI**

Data Specialist & Researcher   October 2022 - Present

- Worked with photo and video evidence from 1925 dig in Karanis, Egypt to contextualize new carbon-14 findings.
- Migrated archives data to a new cloud-based solution, coordinated with technical specialists to finish 3 weeks ahead of schedule.
- Restored damaged footage using DeOldify for colorization and DAIN for frame interpolation.

AC/DC Electric Motorcycles   **Ann Arbor, MI**

Software and Data Lead, Founding Member   April 2023 - Present

- Cofounded AC/DC Electric Motorcycles, a club with a mission to convert inoperable ICE motorcycles into clean, safe, and affordable electric vehicles.

Projects

Image-Based Social Media Web App

Dynamic, interactive, and persistent web app using modern development methodologies

- Implemented dynamic server-side page rendering of custom user feed using Flask and SQLite in Python 3.
- Deployed to AWS EC2 solution, using Nginx for HTTP handling on a Gunicorn server.
- Building client-side dynamic components for infinite scrolling and interaction without page reload (in progress).

32-bit Computer Simulator

Fully functional and complete C-language command line simulator of a 32-bit computer

- Designed an 8-register, 32-bit multi-cycle pipelined processor based on the LC2K instruction set architecture.
- Built a processor simulator with an assembler and linker, including logic for handling data and control hazards.
- Created a simulator of an N-way set associative cache to handle program memory accesses.

Additional

- **Technical Skills:** C++, C, Java, Python, HTML, React, Flask, AWS, XML, Git, Github, DAX, VBA, SQL, Bash, Linux, Workday Studio, Workday Extend, Azure Devops, Power BI, Web Systems, Cybersecurity
- **Languages:** English, Spanish, Latin
- **Awards:** Eagle Scout, Arion Musical Achievement Awardee 2021, Industrial Technology Club 1st in State 2019