

Benjamin Thomas

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Education

University of Michigan

Bachelor of Science in Computer Science & Classical Archeology

Ann Arbor, MI

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

Study abroad coursework, practicum in field archeology

Livorno, Italy

June 2022 - July 2022

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

Experience

Rocket Companies

Technology Intern

Detroit, MI

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

Data Specialist & Researcher

Ann Arbor, MI

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

Software and Data Lead, Founding Member

Ann Arbor, MI

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 user feed using Flask and SQLite in Python 3.
- Deployed to AWS EC2 solution, using Nginx for HTTP handling on a Gunicorn server.
- Added client-side dynamic interaction and infinite scrolling with React, pulling data from a custom REST API.

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