

Lakelon Bailey

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EDUCATION

University of Tennessee, Knoxville

Major in Computer Science

Minor in Mathematics

Graduation: May 2025

Dean's List: Fall 2022 through Spring 2024

Vanderbilt University Boot Camps

Full-Stack Web Development Bootcamp

Graduated September 2022

Grade: A

SKILLS

Programming Languages

C/C++, JavaScript/Node.js, Python, Java, HTML, SQL, CSS

Tools and Frameworks

NodeJS	Digital Ocean
Docker	AWS S3
Express	MySQL
Django	MongoDB
React	PostgreSQL
Vue	Spring Framework
Unix	Linux

Soft Skills

Communication, Leadership, Project Management, Adaptivity, Teaching, Self-starting, Written communication, Teamwork, Agile Methodology, Client Communication

PROJECTS

[sso.lakelon.dev](#): Custom SSO system to be used with a network of future personal projects.

[Blender Bee Swarm](#): Bee pollination animation using Particle Swarm Optimization.

[Particle Swarm Visualization](#): Using Particle Swarm Optimization to create 2D shapes.

[FragranceFinder](#): Best-price finder for fragrances using data from 10+ fragrance sites.

[Memebook](#): Meme social media that allows users to create/like/comment memes and interact with friends.

lakelonbailey.com: Persona portfolio website.

WORK EXPERIENCE

Data Software Engineer Intern, IBM

August 2023 - Present

- Providing device usage data insights and analytics to stakeholders in the Telemetry squad to power device provisioning decisions.
- Maintaining data pipelines and infrastructure to support reporting and analytics across Devices@IBM.
- Led the introduction of IBM's Carrot Framework to the Devices Data Insights team, resulting in productivity enhancements and improved codebase structure for data pipelines and reporting.
- Developed a data pipeline from the device telemetry client to IBM Cloud Object Storage to backup historical device usage data and provide data infrastructure for the Telemetry squad of Devices@IBM.
- Developed a data pipeline from ServiceNow to IBM Cloud Object Storage that runs daily and transfers over 4 million rows from over 10 database tables.
- Migrated existing data pipelines to the IBM Carrot Framework, leading to overall improvements in readability, documentation, and codebase structure.

Software Engineer, ACTprep.com, Inc.

May 2022 - Present

- Leading the software engineering team of ACTprep.com.
- Designed the entire architecture and database of the ACTprep.com company software.
- Developed powerful company software that reduced annual labor/supplies costs by over \$50,000 and increased the total number of students an individual coach can mentor by over 100%.
- Worked side-by-side with the President of ACTprep.com to fully migrate all ACTprep.com internal processes and data management over to a web application developed from scratch in six months.
- Successfully interviewed, hired, and trained a Software Engineering Intern.

Technical Lead, Hack4Impact UTK

August 2023 - May 2024

- Led a team of five student software developers in the creation of a map-based data visualization software designed to provide insights to United Way of Greater Knoxville (UWKG) on where to direct funding/grants based on community support demographics.
- Held periodic meetings with UWKG stakeholders to ensure that the project is following their guidelines and expectations.
- Held weekly programming workshops focused on a Next.js stack based on the MERN stack (MongoDB, Express, React, Node). These workshops prepared my team to develop software efficiently and professionally for UWKG.

Full-Stack Software Engineer Intern, IBM

May 2023 - August 2023

- Contributed to the strategic re-architecture of a global Vue.js/Spring Boot application that facilitates over 315k users, including all IBM employees.
- Refined and implemented modern authentication and authorization mechanisms, significantly improving system security and user experience by ensuring the right access controls for various user roles.
- Re-organized and optimized data retrieval, leading to a 68% reduction in on-page-load API calls.