

Lakelon Bailey

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EDUCATION

University of Tennessee, Knoxville

BS in Computer Science

Minor in Mathematics

Graduation: May 2025 - GPA: 3.29

Dean's List: Fall 2022, Spring 2023

Vanderbilt University

Full-Stack Web Development Bootcamp

Graduation: September 2022

Grade: A

SKILLS

Programming Languages

C, RISC-V Assembly, MATLAB, JavaScript, C++, Python, Java, HTML, SQL, CSS

Software/Framework Experience

Git	Digital Ocean
NodeJS	AWS S3
Google Cloud	MySQL
Express	MongoDB
Django	PostgreSQL
React	REST APIs
Vue	Spring Framework
Unix	Linux

PROJECTS

app.actprep.com: Web application that serves as the backbone for all internal processes of ACTprep.com, Inc.

Memebook: Meme social media that allows users to create/like/comment memes and interact with friends.

lakelonbailey.com: React app that demonstrates my frontend capability while providing a detailed display of my skills and experience.

ACTprep.com Enrollment App: An application that gathers necessary information from newly enrolled students before they begin the ACT prep program.

INVOLVEMENT

University of Tennessee Swimming Club - Member

University of Tennessee Hack4Impact - Tech Lead

COURSEWORK

Data Structures and Algorithms

Linear Algebra

Numerical Algorithms/Scientific Computing

Multivariate Calculus

Differential Equations

WORK EXPERIENCE

IBM

Summer 2023 - Present

Backend Development Intern

- Contributing to the strategic re-architecture of a global Vue.js/Spring Boot application, serving approximately 240,000 device-related requests annually from IBM employees, new hires, vendors, and contractors.
- Leading a pivotal role in the transformation of the application from a monolithic design to a microservices-based structure, enabling more scalable, maintainable, and resilient system performance.
- Refining and implementing modern authentication and authorization mechanisms, significantly improving system security and user experience by ensuring the right access controls for various user roles.
- Collaborating closely with a dynamic team, adapting to agile methodologies, and utilizing problem-solving skills to navigate complex software development challenges.
- Reduced on-page-load API calls by 68% by removing unnecessary data retrieval.

ACTprep.com, Inc.

March 2023 - Present

Chief Technology Officer

- Managing the technology division of ACTprep.com.
- Leading the development and maintenance of the ACTprep.com web application: an application designed to receive and process all company data for the purpose of coaching, analytics, student progress monitoring, and more. This application serves approximately 100 daily users and involves over 30 unique database tables.
- Improving scale of the company by increasing the total possible students a coach can mentor by over 100%.
- Consistently decreasing company costs, having reduced annual labor/supplies costs by over \$50,000.

Make Me Modern, Inc.

August 2022 - March 2023

Full-Stack Software Developer

- Managed and developed the ACTprep.com web application project.
- Assisted in backend and frontend development for assorted company projects.
- Accelerated the primary data query speed of <https://postageapi.com/stats/> page by over 99%.
- Successfully developed a translation pathway to fully migrate a MySQL database to a MongoDB Atlas Cluster while maintaining data relationships for a database containing over 150,000 total records.

ACTprep.com, Inc.

Summer 2022

Contractual Application Developer

- Developed a full-stack web application that utilizes the Google Sheets API to store student enrollment data provided by new students as they traverse through the application's enrollment process.
- Streamlined the ACTprep.com enrollment process by relieving the enrollment coordinator of the need to retrieve student enrollment data through text communication.
- This application successfully facilitated the enrollment process of over 100 students.