­ Lakelon Bailey

[lake.bailey@icloud.com](mailto:lake.bailey@icloud.com) | [lakelonbailey.com](https://lakelonbailey.com/) | [github.com/LakelonBailey](https://github.com/LakelonBailey) | [linkedin.com/in/lakelonbailey](https://linkedin.com/in/lakelonbailey)

EDUCATION

**University of Tennessee, Knoxville**

BS in Computer Science

Minor in Mathematics

Graduation: May 2025

GPA: 3.40

Dean’s List: Fall 2022, Spring 2023, Fall 2023

**Vanderbilt University**

Full-Stack Web Development Bootcamp

Graduated September 2022

Grade: A

COURSEWORK

Data Structures and Algorithms

Systems Programming

Algorithm Analysis/Automata

Linear Algebra

Numerical Algorithms/Scientific Computing

Multivariate Calculus

Differential Equations

SKILLS

**Programming Languages**

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

**Tools and Frameworks**

**Soft Skills**

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

PERSONAL PROJECTS

**FragranceFinder**: Web application that scrapes and displays data from over 10 different fragrance sites.

**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.

WORK EXPERIENCE

**Data Software Engineer Co-op, IBM August 2023 – Present**

* Leading 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.
* Designing and implementing a robust pipeline to rapidly transport 4,000,000+ records from 10+ critical tables from ServiceNow to IBM Cloud Object Storage.
* Migrated SQL-based data reporting processes to the new pipeline, leveraging IBM Cloud Object Storage data.

**Software Engineer, ACTprep.com, Inc. March 2023 – Present**

* 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.
* Improving the scale of the company by increasing the total number of students a coach can mentor by over 100%.
* Consistently decreasing company costs, having reduced annual labor/supplies costs by over $50,000.
* Successfully interviewed, hired, and trained a Software Engineering Intern.

**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.
* Lead a pivotal role in the transformation of the application from a monolithic design to a microservices-based structure.
* 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.
* Organized and optimized data retrieval, leading to a 68% reduction in on-page-load API calls.

**Software Engineer, Make Me Modern, Inc. August 2022 – March 2023**

* Managed and developed the ACTprep.com web application project.
* Accelerated the primary data query speed of <https://postageapi.com/stats/> page by over 99%.
* Developed a data pipeline to fully migrate a MySQL database to a MongoDB Atlas Cluster while maintaining table relationships for a database containing over 150,000 total records.

**Software Engineer, ACTprep.com, Inc. May 2022 – August 2022**

* Developed a 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.
* Facilitated the enrollment process of over 100 students using this application.

INVOLVEMENT

• University of Tennessee Hack4Impact – Technical Lead

Digital Ocean

AWS S3

MySQL

MongoDB

PostgreSQL

Spring Framework

Linux

NodeJS

Google Cloud

Express

Django

React

Vue

Unix