mail@lakelonbailey.com
(865) 816-4695

Lakelon Bailey

https://lakelonbailey.com
US Citizen

EDUCATION

University of Tennessee, Knoxville   Knoxville, TN
B.S. in Computer Science   *Aug 2020 – May 2025*
- **Minor**: Mathematics
- **Coursework**: Data Structures & Algorithms, Systems Programming, Software Engineering, Numerical Algorithms, Computer Graphics, Biologically Inspired Computation, Operating Systems, Programming Languages & Systems

WORK EXPERIENCE

IBM   Raleigh, NC
Data Engineering Intern   *Aug 2023 – Present*
- Tripled the speed of a data pipeline by developing a multi-threaded batch data processor that transports data from the ServiceNow Table API to IBM Cloud Object Storage.
- Improved code consistency and maintainability by migrating 8+ data pipelines to the IBM Carrot Framework.
- Designed and developed a data pipeline that transports device usage data from a computer telemetry client to IBM Cloud Object Storage through a REST API.

ACTprep.com   Remote
Software Engineer   *May 2022 – Present*
- Reduced company labor and supply costs by over $50,000 by digitizing curriculum and increasing the student capacity per coach by 67%.
- Scaled the company to 6 more states by creating timezone-agnostic processes and streamlining enrollment.
- Created a Django/PostgreSQL backend API hosted on a Digital Ocean Droplet that securely manages all company data and backend processes and regularly backs up to AWS S3.
- Created a Docker and Nginx powered network of React apps hosted on an AWS EC2 instance that encompass the UI/UX of the company and interfaces with the backend API for token-based authentication and CRUD operations.

IBM   Austin, TX
Software Engineering Intern   *May 2023 – Aug 2023*
- Contributed to re-architecting a global Vue.js/Spring Boot application, leading to security and performance improvements impacting over 315 thousand users.
- Re-organized and optimized data retrieval, leading to a 68% reduction in on-page-load API calls.
- Designed and implemented an authentication flow that uses JSON Web Tokens and OpenID Connect as a Single-Sign-On provider.

PROJECTS

- **Memebook**: A social media web app for memes. Built the backend using Django and PostgreSQL. Built a pure JavaScript/HTML/CSS frontend with the Bulma CSS framework. Used a websockets to create a live messaging service with read receipts and typing notifications. Implemented media file storage using AWS S3.
- **sso.lakelon.dev**: A custom-designed Single-Sign-On service to be integrated with all future personal web applications. Built the backend using Django and a Supabase PostgreSQL database. Built the frontend using React with TailwindCSS. Used public/private key cryptography for authentication.
- **FragranceFinder**: A best-price finder for fragrances using data scraped from 10+ fragrance sites. Built the Node.js backend using Express and MySQL. Built the frontend using React and Bootstrap.

INVOLVEMENT

- **Hack4Impact**: Director of Engineering for Hack4Impact at UTK. Holding weekly meetings with development teams to ensure that projects are progressing smoothly and following professional development guidelines. Formerly served as Technical Lead for a geospatial data visualization project where I led an agile team of five students in developing a MERN stack web application that manages and visualizes data for United Way of Greater Knoxville employees.

SKILLS

Languages: Python, JavaScript, Java, C++, C, SQL, HTML/CSS
Technologies: Git, Django, React, Docker, Node.js, AWS S3, AWS EC2, PostgreSQL, MongoDB, Spring Boot, Nginx, Pandas, Numpy