Manish Bhusal

413-234-6333| manishbhusal2003@gmail.com| https://www.linkedin.com/in/manishbhusal/ | Github | Website

SUMMARY

Computer Science student with a strong background in full-stack development, cloud computing, and machine learning. Developed innovative solutions to enhance user experiences and effectively led end-to-end projects while collaborating with team members.

EDUCATION

Fisk University Bachelor of Computer Science | GPA: 3.85

Nashville, Tennessee Expected Graduation: May 2026

Relevant Coursework: Data Structures, Algorithms, Computer Systems, Software Development, Computer Architecture, Database Systems.

TECHNICAL SKILLS

Programming languages: Java, C++, Python(Django), HTML/CSS, Javascript, Swift, C#

Tools and Technologies: Git, Linux, Docker, Gitlab, Jira, Maven

Frameworks: Angular, Springboot, Vue.js, React Native **Database/Cloud:** AWS, Azure, MySQL, Oracle, Terraform, PostgreSQL

WORK EXPERIENCE

ZS Associates

Immersion programmer

07/2024, Evanston, IL

- Led the development of a mobile health application, using React Native and MongoDB for database, increasing prostate cancer screening appointment bookings by 30% among high-risk populations
- Conducted assessments to identify disparities in prostate cancer screenings, leading to a 25% increase in awareness and education.
- Collaborated with cross-functional teams to incorporate user feedback into the app design, enhancing educational resources and user engagement, which contributed to a 15% increase in user retention and ongoing participation in screening programs.

Goldman Sachs

Immersive Data Engineer (Market Madness Scholar)

<u>Demo video</u>

06/2023-03/2024

- Worked together with GS Professionals and Nike to develop a mixed reality application for Meta Quest 3 using Unity 3D and leveraging Metamask. Analyzed data to identify pain points in identity and access management systems, leading to a 20% reduction in processing times for change management projects.
- Led user testing for content updates in learning platforms, identifying and addressing bugs through detailed reports and troubleshooting efforts.
- Received Best Concept Design for the project after being selected from 300 students out of 5,000 applicants, recognizing outstanding creativity

Fisk Altitude Achievement Missile Team

Payload Lead

06/2023-Present

- Led a team of eight people under faculty supervision to compete in NASA's University Student Launch Initiative (USLI), a rocket launch competition, representing Fisk University among 56 selected institutions nationwide.
- Developed and programmed a microcontroller system to collect data from the Inertial Measurement Unit (IMU), accurately mapping the rocket's final landing position on a gridded image of the launch site.
- Managed development of payload components (Pterodactyl, Camera Systems, Iridium Modem) using C++ and Arduino, boosting performance.

Himal Recruitment Services

Software Engineering Intern

05/2022 - 08/2022

- Cooperated with a document management team to develop and enhance system features (upload, search, retrieval) using Java and Spring Boot, resulting in a 30% performance
- Installed/configured Red Hat Enterprise Linux (RHEL) 6/7 and established remote log management with Filebeat and Logstash.

Optimized Oracle SQL queries and automated system tasks using Unix shell scripts, resulting in a 20% increase in data retrieval speed.

LYFT Back-end Engineering Job Simulation Program

Remote, 08/28/2023

- Redesigned the architecture of a Lyft rental car servicing system, accommodating evolving service criteria and resulting in a 25% improvement in system performance
- Refactored codebase for improved quality and maintainability, executed unit tests using TDD, enhancing reliability.

Fisk University- Teaching Assistant

04/2022-05/2024

- Assisted professors in teaching discrete mathematics and computer architecture courses to 150 students.
- Conducted office hours and provided detailed feedback, achieving a 95% performance rating.

PROJECTS

My Own Version Control System | JavaScript | Oct 2024 Created a custom version control system in JavaScript that replicates Git's core features, such as file staging, commit history, and version tracking, leading to a 40% reduction in

- Applied file content hashing using SHA-1 algorithm with Node is crypto module to generate unique 40-character hashes for tracking file changes.
- Automated commit logging and retrieval with JSON-based commit data allows users to efficiently view commit history and track changes across versions, resulting in a 30% improvement in user productivity. Improved version control features by using data structures like hash maps for file metadata storage and linked lists for commit history management, enhancing
- algorithmic skills.

ServiceFusion | Angular, Springboot, MySQL | May 2024

- Designed a service booking platform using Angular, Spring Boot, MySQL, and Ng Zorro UI, improving booking efficiency by 30% and providing a user-friendly
- Conducted thorough unit and integration testing, ensuring code quality and identifying potential issues early in the development cycle.

AI YOGA Trainer (Awarded First-Place FRS 2024) | ReactJS, Tensorflow | Apr 2024

- Created an AI fitness trainer system using MediaPipe for real-time pose estimation and OpenCV for image processing.
- integrated webcam access and sophisticated image processing to optimize video frames for the PoseNet model, leading to a 50% increase in user adherence to fitness programs and improvements in overall user satisfaction.

Make a Wish Mobile App (Morgan-Stanley Code to Give Winner) | React Native, Firebase, AWS | Apr 2023

- Led the development of a mobile app for Make a Wish, a nonprofit organization that grants wishes to children with critical illnesses.
- Designed a user-friendly interface for the app and web portal using **React Native**.
- Executed FastAPI to handle requests to the REST API, resulting in a significant performance boost of 200%.

Robotic Arm Project | Solidworks, Arduino, Python | Dec 2022

- Constructed and built a robotic arm capable of gripping and moving objects with a success rate of 95% in task completion during testing phases. Applied control algorithms to achieve precise accuracy and control, enabling the arm to complete tasks with a 1 mm margin of error.

Talkify | NodeJS, ReactJS, ChatEngine.io | May 2023

- Successfully deployed the website on AWS, configuring MySQL databases on Amazon RDS, EC2 instances for hosting, and S3 buckets for media storage.
- Deployed a Python backend for seamless integration with the front end, ensuring efficient data processing, validation, and database operations,
- Leveraged AWS Route53 for domain name management, facilitating easy access to the website.

LEADERSHIP

Google Developers Student Club

- Organized and led workshops, hackathons, and study sessions focusing on Google technologies: Android development, Google Cloud, and TensorFlow.
- Exhibited strong teamwork by fostering collaboration with the crypto innovator, leading to successful tech events to inspire the future of humanity with technology.

AWARDS/HONORS

Awards/Honors: Trustee Award. Springfield College (2021), awarded for highest merit and received \$24,000 of recognition.

- Outstanding Scholars and Leaders Award, Fisk University (2023); Recognized for academic excellence and leadership in the community, receiving \$15000 in a year. Thrill of Possibility Scholar (2023) (Nissan), Innovative Scholar 2024 (Meta)
- CERTIFICATIONS: Goldman Sachs Software Engineering Virtual Experience Program, Introduction to Front-End Development (Meta), Google Cloud Fundamentals: Core Infrastructure, Foundations of Project-Management