Bharat Khadka

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Education

Georgia Institute Of Technology

Atlanta, GA

Bachelor of Science in Computer Science

Expected May 2027

Experience

Kroger Technology & Digital | Internship

May 2024 – August 2024

Software Engineer

Blue Ash, Ohio

- Reduced End-to-End testing time from 5 business days to overnight, enabling code to be deployed 5 times faster, by automating processes with Selenium WebDriver.
- Increased automated test coverage by 10% by developing 20+ scripts using Java, Maven, TestNG, and Selenium.
- Decreased manual testing effort by 40% by implementing robots to simulate credit and debit card transactions.
- Improved code modularity and maintainability by designing 10 map and page classes based on the Page Object Model.
- Enhanced sprint efficiency by resolving 15+ Frontend, Backend, and QA tickets, leading to faster production.
- Streamlined CI/CD processes by implementing automation through GitHub Actions.
- Implemented Agile methodologies by practicing Kanban, leveraging Jira boards and daily stand-ups to manage user stories and track progress effectively.

CTL Aerospace | Internship

May 2023 - August 2023

Cincinnati. Ohio

Manufacturing Robotics Engineer

- \bullet Increased workplace efficiency by 50% by automating complex manufacturing processes, resulting in faster production.
- Developed and calibrated robotic systems for aerospace manufacturing, enhancing production capabilities and precision.
- Established communication protocols between robots and external attachments, enabling compound operations and improving workflow integration.
- Provided training, established process documentation, and developed maintenance schedules, ensuring operations sustainability and reducing downtime.

Extra-Curriculars

J.P. Morgan Software Engineering Virtual Experience on Forage

July 2024

Cincinnati, Ohio

• Used Perspective to generate a live graph that displays a data feed for traders to monitor using TypeScript and React.

First Robotics Competition

January 2021 – May 2023

Lead Programmer

• Led a 55-person team to design and develop three 120-lb robots within 6 weeks.

- Secured 4th place in 2 regional competitions as well as in world championships with 4 separate awards for excellence.
- Developed Gantt charts and schedules while facilitating day-to-day operations of team members to train recruits.
- Collaboratively optimized 3 robots by implementing Object Oriented Programming, Command Based Programming, Visual Tracking, Telemetry, Motion Profiling, Autonomous Routines, 3D Odometry, and Path-planning.

Projects

CatScan | Facial Recognition and Identification Using Machine Learning on Raspberry Pi

Present

- Engineered a facial recognition system using OpenCV and C++ for accurate analysis of age, gender, and ethnicity.
- Trained AI models to enhance classification, significantly improving the accuracy of the recognition algorithm.
- Incorporated multiple systems into a single product for reliability and operation.

Game Development | Personal Hobby for Educational and Recreational Purposes

December 2023

- Created games to play with friends on Roblox with Roblox Studios and Lua.
- Developed Minecraft server plugins using Java, Maven, and Spigot API
- Recovered discontinued games by recreating them in Unity Studios using C# and Asperite.

Harvard CS50: Introduction to Computer Science | Online Course Offered by Harvard

June 2023

- Achieved proficiency in web development by creating websites using HTML, CSS, JavaScript, Bootstrap, and Flask.
- Functionalized databases by integrating SQL into Python applications to manage and sort real-time data.
- Created applications to track stock prices, manage calendar scheduling, and sort user information using React JS.

${\bf Respawn Robotics.com} \ | \ {\it Informational Website for Robotics Team}$

December 2022

- Collaborated with peers to create a website for STEM Outreach, Business Communication, and Monetary Sponsorship.
- Assisted in developing Respawn Recon, an open-source web app for FRC data collection, analysis, and representation.

Skills

Technical Languages: Python, Java, C++, SQL, JavaScript, Lua, C#, HTML/CSS

Frameworks: Flask, React, Selenium, Maven, TestNG, Django, Node.js

Tools: Git, GitHub Actions, Jira, Qmetry, Figma, Linux