

SURAJ GUPTA GUDLA

surgudla@iu.edu | 812-369-3881 | github.com/surajgupta-git | linkedin.com/in/surajguptagudla

EDUCATION:

Indiana University, Bloomington, IN, USA

Jan '21 – May '22

Master of Science in Computer Science

GPA: 3.6/4

Coursework: Applied Algorithms & Data Structures, Applied Distributed systems, Elements of Artificial Intelligence, Applied ML, Operating Systems, Data Mining, Management of Bigdata

Chaitanya Bharathi Institute of Technology, Hyderabad, India

Sep '14 - May '18

Bachelor of Engineering in Electronics and Communication

GPA: 9.3/10

PROJECTS:

- **PixelGram [React JS, Node JS Python, Docker Jenkins, Kubernetes, Kafka, JMeter, SQLite DB]:** Designed and developed a highly scalable fault tolerant distributed systems based web Application to share, upload, download and organise photos employing the Micro-Services Architectural pattern. Built a CI/CD pipeline USING Jenkins to deploy the containerized microservices on a Kubernetes cluster running on a Jetstream instance. [\[GitHub\]](#)
- **Route Finder:** A python application designed from scratch using the A* Search algorithm that gives the optimal route between 2 cities considering various constraints like fastest, shortest, safest etc. Haversine distance has been used has the heuristic function to improve the accuracy. [\[GitHub\]](#)
- **Restaurant Management System:** Developed a static front-end restaurant management website using express JS for the routing and React JS for the functionality and appearance, hosted the application into web using Google Firebase. [\[GitHub\]](#)
- **Movie Recommender System:** A python application that recommends movies to a user based on his watching history and interests. Achieved an accuracy of 94.7%. [\[GitHub\]](#)
- **Home Automation System [Embedded Systems & IoT]:** Designed and developed a system to control all the home Appliances remotely. Used Mosquito MQTT as the messaging broker between the NodeMCU and the cloud. Developed the control dashboard using vanilla JS, HTML & CSS.

PROFESSIONAL EXPERIENCE:

Associate Instructor, Intro to Programming CSCI-A 201

IUB | Jan '21 – May '21

- Conducted labs and office hours to advise and assist 241 students with their coursework and assignments.
- Prepared coursework materials such as assignments, homework, quizzes and evaluated them.

Education Systems Consultant

IUB | Apr '21 – present

- Trained a team of high school students in *Problem Solving & Computing* as part of the pre-college summer program.

NCR Corporation – Software Engineer

Hyderabad, India | Jul '18 – Dec '20

- Delivered several ATM SW security enhancement features and applications using C# .NET under anticipated target timelines.
- Coordinated in different phases of the product delivery (Analysis, Development, Testing, Documentation, release activities & maintenance, Customer Support) under **Agile SDLC**.
- Debugged potential issues in production and development to mitigate the effect and addressed the issues with a turnaround time of 1-2 days. Reduced security risks, Bugs & memory leaks by performing frequent code analysis with Coverity.
- **NCR Secure Enhanced OS Hardening:** Developed an application and various DLLs from scratch using C# that joins a PC to a secure domain and enables automatic logon into secure locked-down domain accounts; Developed Batch and PowerShell scripts to create schedule tasks and manage OS privileges, registries, security policies in the Microsoft ADDS.
- **Remote BIOS Update:** Developed a BIOS firmware Flashing utility and several applications for BIOS password and boot management. Performed code Migration form AutoIT scripts to C# .Net to improve code integrity and functionality; Automated the testing suites using AutoIT V3 automation scripts and reduced man-hours by 70% for the testing team.
- **Hard Disk Encryption:** Created a Dashboard for the encryption status & health monitoring. Administered the Windows server and maintained MS SQL DB. Troubleshooted the customer complaints on encryption failures. Automated the Encryption configuration and deployment process using AutoIT automation scripts to improve the customer experience.
- **Employee skill tracker [NCR Global Hackathon '19]:** Developed a full stack web application prototype that can be leveraged as skill repository of all employees in a company. Spring Boot, MySQL DB and JPA have been used for the backend and React JS has been used for the frontend.

SKILLS & COURSEWORK:

- **Programming & Scripting Languages** : C# .Net, Java, Python, AutoIT, Batch, Power Shell
- **Web** : HTML, CSS, SQL, React JS, Node JS, SQL, Database (MySQL, MongoDB)
- **Machine Learning Libraries** : NumPy, Pandas, matplotlib, scikit-learn, TensorFlow
- **Technologies** : Docker, Kubernetes, Jenkins, Kafka, JMeter, AWS
- **Other** : GIT, JIRA, confluence, Crucible, Zephyr, WiX, SonarQube, Coverity

CERTIFICATIONS:

- **Front-End Web Development with React** | Credential (Coursera ID: JPDJFXWEURWT)
- **Server-side Development with NodeJS, Express and MongoDB** | Credential (Coursera ID: 7FT3XL6ZF8EA)
- **Full Stack Web Development** | Codecademy - [Credential](#)
- **Machine Learning with Python** | IBM, Coursera – [Credential](#)
- **Java Programming** | Udemy - [Credential](#)