SURAJ GUPTA GUDLA

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EDUCATION:

Master of Science in Computer Science — ***January 2021 – December 2022***
Indiana University, Bloomington, IN, USA — *GPA: 3.7/4*

Bachelor of Engineering in Computer Engineering — ***September 2014 - May 2018***
Osmania University, Hyderabad, India — *GPA: 9.27/10*

WORK EXPERIENCE:

Associate Instructor - Indiana University, Bloomington, Indiana, USA
Words and Pictures — ***May 2021 – Present***

- Taught the ways of scraping the data from the web using **Beautiful Soup and Selenium** libraries and data cleaning using **Python.**
- Explained and guided on how to represent the data collected as charts and maps using **CARTO and Chart JS** for their projects**.**

Intro to JavaScript — ***January 2021 – May 2021***

- Framed quizzes and practice questions for the **JavaScript** programming assignments and evaluated the student's projects.
- Conducted labs and office hours to advise and assist students with their coursework, assignments and projects.

Software Engineer 1 - NCR Corporation, Hyderabad, India — ***July 2018 – December 2020***

- Collaborated with multiple teams and delivered several ATM Software Security enhancement features and applications to prevent fraud and cyber-attacks with ATM transactions such as Remote OS hardening, locked-down accounts, remote BIOS management & imaging and disk encryption using **C# .NET** and a variety of **scripting technologies** under target timelines.
- Boosted market profits by 30% by delivering a product "Remote Security administration" developed entirely from scratch using C# and Slashed the man-hours by 50% for the testing team by automating the test suites, configuration, firmware upgrade/downgrade and deployment process using **AutoIT V3** and windows **Batch** scripts.
- Migrated the codebase from AutoIT scripts to C# .NET to maintain code integrity and enhance the security of ATM software.
- Administered the **Windows server 2012 R2**, the **SQL Server** management studio and Microsoft active directory (**ADDS**) for the projects undertaken.
- Handled potential issues in production and development with a turnaround time of 1-2 days. Reduced and resolved security risks, bugs, code smells & memory leaks by performing frequent code analysis with **Coverity & SonarQube**.
- Improved the Customer experience by developing a web dashboard that displays the encryption status and detailed info. using **React JS & Material UI** by fetching the data from the API server using **AXIOS**.
- Coordinated in different phases of the product delivery (Analysis, Development, Testing (TDD), Version Control, Deployment, Maintenance, Documentation, Customer Support & Troubleshooting) under **Agile** software development lifecycle.

SKILLS:

- **Programming & Scripting Languages**: C++, C# .NET, Java, Python, JavaScript, AutoIT, Power Shell, Batch
- **Web Technologies**: HTML, CSS, SQL, NoSQL, React, RESTful-API, Node, Flask, Databases (SQL Server, MySQL, MongoDB)
- **Python Libraries**: NumPy, Pandas, matplotlib, scikit-learn, Selenium, Beautiful Soup
- **DevOps**: Docker, Kubernetes, Jenkins, GIT, Apache Kafka, RabbitMQ, Apache JMeter, VMware, JetStream
- **Cloud**: AWS (EC2, S3, RDS, DynamoDB, IAM, VPC), GCP (Basics)
- **Other**: Jira, Confluence, Crucible, Zephyr, WiX, SonarQube, Coverity, Eclipse, VS Code, Postman, Firebase, Linux
- **Certifications:** AWS Certified Cloud Practitioner || Algorithmic Toolbox || Data Structures|| Machine Learning with Python, IBM || Front-End Web Development with React || Server-side Development with NodeJS, Express and MongoDB
- **Coursework:** Algorithms & Data Structures, Distributed Systems, Elements of Artificial Intelligence, Applied Machine Learning, Bigdata, Operating Systems, Software Engineering, Computer Organization and Architecture, Computer Networks

PROJECTS:

- **PixelGram [React, REDUX, Node, Python, Docker, Jenkins, Kubernetes, RabbitMQ, JMeter, SQLite DB]:** Designed and developed a fault-tolerant distributed systems based web application with high availability & scalability which can be used to share, upload, download and organize 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 cloud VM instance setup on Jetstream. Used Google Drive as the photo storage and leveraged GIT effectively for the source code and project management.
- **Movie Store [React, Mongo DB, Express, Node, AWS]:** Developed a MERN stack web application that displays the latest collection of movies and related information wherein the authenticated users can like a movie, mark their favourites and post reviews. Deployed on an AWS EC2 instance with NGINX as the frontend web server and node as the backend server along with a cloud Mongo DB cluster to store the movie data and AWS S3 bucket to store the Movie posters.
- **Home Automation System [UG project]:** Designed and developed an IoT system to control all the home appliances remotely. Used Mosquito MQTT as the messaging broker between the NodeMCU and the cloud. Developed an interactive control dashboard UI using HTML, CSS, WebSockets, Eclipse Paho JS library, jQuery and hosted using Firebase. [Project report]
- **Toxic Speech Classifier [NLTK, HTML, CCS, Flask, Matplotlib]**: Developed a Machine learning based web application that can classify user provided speech into various toxic categories like Normal, Toxic, Obscene, Threat, Insult, Hate using the Natural language Toolkit(NLTK) library in python. Used HTML & CSS for the front end and Flask as the backend framework.
- **Employee skill tracker [NCR Global Hackathon '19]:** Developed a full-stack web application prototype that can be leveraged as a skill repository of all employees in a company. Backend is implemented using Spring Boot, MySQL Database and JPA for the ORM. Frontend is implemented using React JS along with Axios library for the http requests.