### **HIMANSHU**

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### **EDUCATION**

**Indiana University Bloomington** Master of Science in Computer Science, Cumulative GPA: 3.9/4.0 Bloomington, Indiana, US

Aug 2021 - May 2023

Jaypee University of Information Technology

Waknaghat, India

Bachelor of Technology in Computer Science and Engineering, Cumulative GPA: 8.3/10

Aug 2013 - Jun 2017

**PROFESSIONAL EXPERIENCE** 

**Luddy School of Informatics, Computing, and Engineering (Indiana University)** 

Bloomington, Indiana, US

Student Intern

Jul 2023 - Present

Architected development of a free open-source application that will help the general public to learn about memory research

Graduate Teaching Assistant

Aug 2022 - May 2023

Taught 4 courses during masters including Algorithm and AI courses

Led classes of more than 120 students, helped students in understanding the concepts

Siemens

Princeton, New Jersey, US

Jun 2022 - Aug 2022

Software Development Intern

Engineered industrial infrastructure solution for asset monitoring and analysis of utilities, turbines and nuclear power plants

- Designed Network Graph User Interface using ReactJS, NodeJS and ElasticSearch, decreasing monitoring time by 10%
- Wrote CI/CD pipeline scripts for GitLab repositories to build and deploy the project, decreasing deployment time by 20%

Capgemini Senior Software Engineer (SE III) Gurugram, India

Dec 2017 - Jul 2021

Developed telecom solutions and Intelligent Network Services for European Telecom companies

- Developed user Interface & API of the Nokia SPS component by utilizing technologies like ReactJS, JavaScript, Bootstrap, Spring
- Collaborated & Constructed a Knowledge Base for technologies like ReactJS, JavaScript, Java, SQL
- Managed 4-5 developers to develop a proper structure for developing ReactJS and Spring components
- Familiarity of Containers and Virtual Machines & got Rising Star Nokia BU award

#### **Development of Web RTCC**

Mar 2019 - Jul 2021

RTCC IN service is GSM SCF functionality in SPS solution. Web application acts as a provisioning interface for RTCC service

- Implemented frontend and backend for RTCC objects using ReactJS and Spring boot, lowering development time by 25%
- Implemented JSTree in ReactJS, decreasing development time of components to 50%
- Streamlined delivery process with Jenkins CI/CD and other Devops tools, decreasing delivery time by 20%
- Facilitated validation team and customer to test and deploy the service, increasing acceptance rate by 15%

# Maintenance and Development of MCAS (Modular Convergent Application Server)

Dec 2017 - Jul 2021

MCAS is a high performance, reliable and robust environment for IN Java coded real-time applications that demands high throughput

- Gave consultancy to customers & handling change request, reducing escalation of request by 30%
- Led a team of 2-3 developers for upgrading mCAS product, lowering process time by 20%
- Created platform to run & deploy intelligent network services produced in MCAS, enhancing code quality by 40%
- Coded & deployed an intelligent network application service LCR for Telenet client reducing development time by 50%

#### **PROJECTS**

**Party Pad** 

### **Vehicle Detection and Counting in Images**

Mar 2023 – May 2023

Researched, trained state-of-the-art computer vision models (YOLOV7, RCNN, Retinanet) using transfer learning techniques in Python to detect and count vehicles in images with an average accuracy of 80%

Sep 2022 – Dec 2022

Architected and executed the implementation of a booking web application using ReactJS, Django, HTML, CSS, AWS, and SQL; designed functionality for 2 users hosts, and guests

### **Multi-Layer Perceptron**

Nov 2021 - Dec 2021

Constructed a custom MLP code using Python, eliminating the need for Al libraries with 5% reduction in training time

## Checker Al

Oct 2021 - Nov 2021

Created and deployed Python-based AI code for Checkers game without reliance on external libraries, resulting in an AI opponent with a win rate of 50% against human players

**Tetris Al** 

Oct 2021 - Nov 2021

Engineered an AI algorithm in Python for the Tetris game, with a maximum score of over 500 points

#### **SKILLS**

Tools and Programming Languages: Java, Python, HTML, CSS, JavaScript, Bootstrap, SQL, NodeJS, Spring, ReactJS, MongoDB, MySQL, ElasticSearch, Eclipse, IntelliJ, Git, Jenkins, Jira, Agile Methodologies, CI/CD, Rest API, Maven, Junit, Mockito