SHAURYA SHEKHAR

MADISON, WI

#### **EDUCATION**

UNIVERSITY OF WISCONSIN - MADISON   M.S. COMPUTER SCIENCE CGPA: 4.0 / 4.0	Sep'19 – Dec' 20
• Coursework: Machine Learning, Operating System, Artificial Intelligence, Distrib	uted
Systems	

VIT UNIVERSITY, VELLORE, INDIA | BTECH. COMPUTER SCIENCE CGPA: 8.72/10 (TOP 10%) IUL '14 - Mav'18

### **WORK EXPERIENCE & INTERNSHIP**

### **AMAZON WEB SERVICES** | SOFTWARE DEVELOPMENT ENGINEER INTERN

- Worked in the Alexa for Business unit to develop an application which allowed for virtual testing for Alexa Skill permissions.
- Was responsible for requirement gathering, project planning and application design and used **Java** and **Spring** for the backend and React for the frontend.
- Availability of option to test permission virtually reduced the time needed to test Alexa Skill permission by 65%.

# **MORGAN STANLEY (FOR WISSEN TECHNOLOGY)** | Technology Consultant

- Worked on Java, Spring and Angular to migrate a PB Custody Tech project and was awarded the Best Team Award internationally in the Institutional Securities Tech Division.
- Designed software architecture, performed database optimization and built API services from scratch using the Model-**View-Controller** design pattern for the project. Also worked on fixing complex UI bugs.
- Performed critical backend debugging in time-constrained manner and reduced deployment time of fixes by around 66%.
- Automated deployment using Jenkins and slashed build & deployment time by 75%. Responsible for uptime of 99% post going live with clients.

# **BHARTI AIRTEL LIMITED** | SUMMER ENGINEERING INTERN

- Modified the MQTT protocol header to optimize for cloud computing and implemented an interval based transmission algorithm which allowed for support for >25,000 devices at any point of time
- Developed a data-warehousing framework (in Python) for faster OLAP reducing the disk-space requirement for transactional database by 25% and used Raspberry Pi & AWS to build a prototype.

## **PROIECTS**

#### Industrial Training Project - Interview Web Tool - JustHire

Jun'18 – Jul'18 • Developed tool to automate the process of taking interviews with the difficulty level of questions being dynamically modulated according to the performance of the candidate using **Java** & **Angular**.

#### **Research Project - Data Breach Analysis And Solution for Aadhaar**

- Performed Principal Component Analysis (PCA) on 2004 2017 dataset to identify critical factors (such as year, type of organization, type of industry) by making use of **dimensionality reduction** and **feature elimination** techniques.
- Used Lowess regression to predict the number of data breaches in the future on the basis of the dataset and 66% accuracy was achieved by balancing overfitting and underfitting.

#### Software Engineering Coursework Project – OCR for Devanagari Script

- Developed an Optical Character Recognition Software for Devanagari script to provide text in an editable format using Python and Google Tensorflow Neural Network using supervised learning approach.
- Achieved 91% accuracy and 83% validation accuracy and reduced cross entropy to 0.44.

#### Algorithm Design – Pseudo Random Number & Random Variate Generation

- Implemented pseudo random generator using different algorithmic techniques and performed statistical analysis to check the randomness of generated numbers.
- Used linear congruential method, combined linear congruential method and Poisson distribution method for random number generation.

SOFTWARE SKILLS	C++, Java, SQL, JavaScript, Kotlin, HTML, Data Structures & Algorithms, Python, CSS	
FRAMEWORKS	Spring Boot, Spring MVC, Angular, React	
TOOLS	Git, Jenkins, JIRA, AWS, Swagger, Tomcat	
LEADERSHIP	Instructed session on Programming Skills as part of a Robotics Workshop organized by IEEE in	
	VIT (Sep-14)	
	• <b>Peer Mentor</b> for the Computer Programming & Problem Solving class in VIT University.	
<b>OTHER INTERESTS</b>	Teacher (Make A Difference), Member (University Debate Society & Google Developers Group)	

## **Skills, Leadership & Other Interests**

Jan'17 – May'17

Jan'16 – May'16

Dec'17 – May'18

Mav'20 – Aug'20

Jun'18 – Jun'19

Jun'17 – Jul'17