SHAURYA SHEKHAR

MADISON, WI

(608) 590 3117/sshekhar4@wisc.edu

linkedin.com/in/shauryashekhar / shauryashekhar.github.io

EDUCATION

UNIVERSITY OF WISCONSIN – MADISON | M.S. (COMPUTER SCIENCE) [Sep'19 - Present]
- **Current Coursework:** Operating System, Artificial Intelligence, Data Management

VIT UNIVERSITY, VELLORE, INDIA | BTECH. (COMPUTER SCIENCE) CGPA: 8.72/10 (**TOP 10%**) [JUL '14 – May'18]

WORK EXPERIENCE & INTERNSHIP

MORGAN STANLEY (FOR WISSEN TECHNOLOGY) | *TECHNOLOGY CONSULTANT* [Jun'18 – Jun'19]
- 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.
- Tasked with designing software architecture, performing database optimization and building API services from scratch using the **Model-View-Controller** design pattern for the project. Also worked on fixing complex UI bugs.
- Responsible for quick backend critical fixes and reduced the time for deployment of quick fixes by around 33%.
- 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* [Jun'17 – Jul'17]
- 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.

ACADEMIC PROJECTS

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 [Dec'17 – May'18]
- 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 [Jan'17 – May'17]
- 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 [Jan'16 – May'16]
- 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.

RESEARCH PAPERS

- **Published** – 'Privacy and Security in Aadhaar' – International Journal of Engineering Development And Research, Volume 6, Issue 4, October 2018 – Link: https://www.ijedr.org/viewfull.php?&p_id=IJEDR1804017
- **Published** - 'Efficient Object Recognition Using Convolution Neural Networks' - International Journal of Computer Application, Volume 161, Issue 2, March 2017 – Link: http://www.ijcaonline.org/archives/volume161/number2/thakral-2017-ijca-913123.pdf
- **Published** - 'Internet of Things and Creation of Fifth V of Big Data' - International Journal of Science and Research, Volume 6, Issue1, January 2017 – Link: https://www.ijsr.net/archive/v6i1/ART20164394.pdf

SKILLS, LEADERSHIP & OTHER INTERESTS

SOFTWARE SKILLS	C++, Java, SQL, Angular, R, HTML, Data Structures & Algorithms, Python, CSS, JavaScript
FRAMEWORKS	Spring Boot, Spring MVC
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) • **Peer Mentor** for the Computer Programming & Problem Solving class in VIT University.
OTHER INTERESTS	Teacher (Make A Difference), Member (University Debate Society & Google Developers Group)