Portfolio maheepmahat1@gmail.com LinkedIn Blacksburg, VA 540 557 8604

— SKILLS -

Languages: Python3, Java9, JavaScript, TypeScript, C, C++, SQL, HTML5, CSS3

Frameworks & Libraries: Django, Spring MVC, React.js, Spring Boot, Node.js, D3.js, Express.js, jQuery, Scikit, Pandas Databases and tools: PostgreSQL, MongoDB, MySQL, H2, Jenkins, Kubernetes, Figma, REST, Git, Maven, Docker.

WORK EXPERIENCE

Virginia Tech, Blacksburg, VA, US

Jan 2022 - Present

Graduate Research Assistant, Full Stack

- Increased data retrieval speed by 50% using denormalization, data aggregation, data cubes and in-memory processing. Reduced user wait time by 5 seconds ensuring faster rendering of large-scale data sets.
- Accelerated information look up workflow by 30 seconds. Developed a dashboard web app using Django, React.js and Leaflet for the Virginia State Police that shows accident and over-speeding data on a map.
- Increased the speed of big data ingestion into the database by 100% from 6 hours to 3 hours using pruning, partitioning and Tuplex resulting in faster workflow.
- Developed a platform to visualize the largest psychophysiological database in the world without lag by leveraging server-side rendering using React.js, Node.js, Express.js, MongoDB, D3.js and Plotly.

Mediaocean, Pune, India

July 2020 - Aug 2021

Associate Software Engineer, Full Stack

- Reduced the document verification process by 10 minutes through adding a 2-step authentication feature (Email OTP or Text OTP) resulting in faster document approval time.
- Decreased deployment window by 10% through automating manual steps in production releases and refactored puppet modules to optimize resources use.
- Optimized pdf document processing to speed up final document generation by up to 15% using cache optimization and indexing.
- Utilized Java 9, Spring Boot, Spring MVC and React.js to develop iterative Server and UI features into Prisma and Radia inhouse products and performed Root Cause Analysis on a regular basis.

Siemens Industry Software, Pune, India

May 2019 - July 2019

Software Engineering Intern, Zeus R&D Team

• Developed a self-generating connector prototype for in-house microservices using the Mendix which enabled performing CRUD operations on all the microservices in the Siemens local network.

- EDUCATION -

Master of Science in Computer Science (GPA: 3.85/4)

Jan 2022 - Present

Virginia Tech, VA, United States of America

B Tech. Computer Engineering (GPA: 9.2/10)

Vishwakarma Institute of Technology, Pune, India

Aug 2016 - June 2020

- RECENT ACHIEVEMENTS

- Awarded full scholarship of over \$113,000 (including monthly stipend) for graduate program at Virginia Tech.
- Honored with the Mediaocean Rising Star award recognizing outstanding performance and contributions.
- Received Student Achievement Award (2020) from CS Dept. at Vishwakarma Institute of Technology.

- RECENT PROJECTS

Emotion In Motion Project: Developed a platform for the largest psychophysiological dataset in the world by using Coordinated Multiple Views to perform pattern analysis on physiological data using Hidden Markov Model.

E-Voting System Using Blockchain: Developed a prototype voting application using blockchain technology to improve over existing methods.

RECENT PUBLICATIONS -

- Detecting Cyber bullying across multiple social media platforms using Deep Learning (IEEE) ISBN 978-1-7281-7742-7
- Reconstructing obfuscated human faces using conditional adversarial Network. (Springer) ISBN 978-981-15-1884-3
- Prediction and Prevention of Addiction to Social Media Using Machine Learning. (Springer) ISBN 978-981-334-859-2