VEDANT MAHAJAN

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Education

University of Illinois Urbana-Champaign **Aug 2024 – Dec 2025**
Master's in Computer Science

Vishwkarma Institute of Technology, Pune (SPPU) **Aug 2018 – July 2022**
Bachelor of Technology in Computer Engineering *9.35/10*

Experience

Credit Suisse **July 2022 – July 2024**
Technology Analyst *Pune, India*
- Developed a Java API microservice to initiate Kubernetes Jobs and Cronjobs. Containerized a monolithic time series application using Docker, enabling its migration to the cloud. This transition resulted in an 70% reduction in cost.
- Contributed in remodelling RiskCalc Engine, decoupling it from Oracle Database by implementing C++ Services, GRPC for messaging, and Redis cache, effectively managing approximately 10 million records.
- Engineered a Python module to implement complex Data Preprocessing for FRTB SA Calculations across 21 asset classes, reducing business effort by 98%.
- Automated Bank's Hierarchy Reorganization using Python, including XML modification and orphan node identification, reducing manual man-hours by 99%.
- Worked on enhancing the Script Impact Analysis Tool on AngularJS with a C++ backend and Oracle Database, optimizing performance across 1000+ scripts.
- Upgraded two complex Angular applications from version 6 to version 16, implementing code changes and resolving dependencies.

Credit Suisse **June 2021 - December 2021**
Technology Analyst Intern *Pune, India*
- Developed an Application for Automation of Modification of Complex XML Scripts.
- This tool reduced the time needed for Modification manually by 95% and significantly increased efficiency, worked on technologies such as C(Sharp), .NET, LINQ, GUI Development.

Projects

Abstractive Text Summarization of Hindi Corpus | *Natural Language Processing, Transformers* | *Link* **July 2022**
- Facebook's fastText model is used to generate highly efficient pre-trained word representations.
- A Transformer Encoder Decoder model is utilized to extract contextual dependencies, enhancing semantic representations, resulting in concise, abstractive summaries.
- Evaluation on the Hindi news dataset, generating news article headlines, attained a ROUGE-1 precision and recall score of 0.682 and 0.598.

Investech | *Python, Natural Language Processing, Streamlit* | Link **May 2021**
- Website to display ESG Scores, Tones, Word Densities based on news articles, tweets and other news sources on listed Companies.
- GDELT Database used as News Source by NLP model to calculate various metrics, a recommender system is developed using Node2Vec library to suggest companies with similar metrics.

Chain4India | *Hyperledger Sawtooth, Mithril JS, Node JS* | Link **April 2021**
- Leveraged Hyperledger Sawtooth Platform for Blockchain to create an secure and trusted network for Medical Equipment Procurement.
- Implemented Concurrent Rest API's to interact with Rethink DB and Serving Web App and used Mithril JS framework to develop frontend.

Technical Skills

Languages : Python, C++, Java, Javascript, SQL, Typescript, C# **Cloud & Devops** : Azure, AWS, Docker, Kubernetes
Frameworks : SpringBoot, Angular, React, Django, MithrilJS, Flask, FastAPI, WinForms, CMake
Technologies: Databricks, Linux, Jenkins, Git, gRPC, Shell Scripting, MongoDB, Redis, Tensorflow, PLSQL

Achievements

- **Hackathons** : IIT-ISM Dhanbad Hackfest 2021 Winner, Rakathon 2021 Finalist about 7000 participants.
- **Certifications** : Completed Azure AZ-900 Certification and the Web Developer Bootcamp on Udemy.
- **Problem Solving** : Solved more than 700+ on leetcode, Credit Suisse's Global Coding Challenge Global Rank 219.
- **Awards** : Recieved the Go Extra Mile and 4 RAVE (Appreciation Awards) at Credit Suisse.