#### PRATEEK RALHAN Work Experience : 6 Years Research Experience: 2 Years

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#### **WORK EXPERIENCE**

# **Digital Solutions Engineer (Assistant VP)**

#### **Swiss Re**

Oct 2023 - Ongoing

- Currently building GPT4-o and GPT4o-mini based large scale documents orchestration frameworks using Foundry and Spark for global risk engineering and property underwriting function in commercial insurance, with capabilities to process 1000+ documents in 1 hour with maximum throughout and 90-95% Precision/Recall.
- Leading the knowledge workstream of educating and upskilling the business users and internal audience regarding AI governance, model governance and GenAl ethics as a part of Fair, Transparent and Accountable Al adoption within the organization.
- · Lead the end-to-end design and development workstream for implementation of an in-house LLM results' evaluation and benchmarking framework using Palantir foundry across different LLM providers (OpenAI GPT variants, Gemini, Llama, Mistral etc.)
- · Leading the engineering frontier for end-to-end big data analytics and reporting based analytical solutions in a cross-regional and cross functional team using Palantir Foundry and Azure.

# **Associate Digital Solutions Engineer**

**Swiss Re** 

March 2020 - Sept 2023

- Lead the complete engineering and deployment setup for key customers' and vendors' invoices data ingestion automation framework using Palantir Foundry and Azure (Azure Document intelligence and Azure Translation services), leading to annual time savings and efficiency gain of approx. 6500 hours.
- · Collaborated cross functionally with product team and business team for end-to-end data ingestion and migration from source systems (traditional MS SQL server and Oracle databases) to Palantir foundry as a part of complete overhaul and revamp of the BU's data model leading to better throughput and data availability for the business by 20%.

## **Graduate ML Engineering Intern**

**Swiss Re** 

June 2019 – February 2020

- Successfully developed and deployed a text-mining framework for commercial insurance risk screening which is actively used by global risk engineering and underwriting function (500+ DAU) leading to approx. increase in CMR of USD 5M due to improved cost containment.
- Engineered and deployed an MVP in the form of an end-to-end pipeline for automatic Segmentation of standard carrier reports as a part of global risk engineering and underwriting for synchronized Information Extraction and document classification which reduced the Turn-around time for key customers by 40%.

**Schneider Electric Technical Intern** Summer 2017

- · Worked on the hardware design and software schematics of Smart Uninterrupted Power Supply Systems based on IGBT (Insulated Gate Bipolar Transistor) Technology.
- Worked on designing and rendering the Electrical Layout of large-scale data centres and equipment using Autodesk Revit 2017.

### **Embedded Systems Intern**

### WebTek Labs

Winter 2016

- Mainly worked on designing a fully functional prototype of RFID based Attendance System using Advanced Virtual RISC (AVR) microcontrollers.
- · Worked on embedded software development using state machines for Traffic control systems, coffee vending machines and washing machines using the IBM Rhapsody Tool.

#### **TECHNICAL SKILLS**

- Programming Languages PySpark, Python, C++,
- Operating Systems Ubuntu 16.04 LTS, Windows
- Database and Cloud Services MySQL, Microsoft SQL Server, Palantir Foundry. Microsoft Azure, Google Cloud Platform
- Frameworks and tools Numpy, Pandas, Matplotlib, Seaborn, Scikit-learn, Tensorflow, Keras, OpenCV, Cogito
- Others GitHub, Docker, Flutter, Adobe Photoshop, Adobe Premiere Pro.

#### **EDUCATION**

Bangalore, India

**BITS Pilani** 

April 2024 - ongoing

**CGPA:** - /4

• M. Tech. in Machine Learning and Artificial Intelligence

**IIIT Bangalore** Bangalore, India • Post Graduate Diploma in Machine Learning and Artificial Intelligence

**CGPA:** 3.3/4

**August 2019 – October 2020** 

Chennai, India • B.Tech. in Electronics and Communication Engineering. July 2015 - May 2019

SRM Institute of Science and Technology **CGPA:** 9.2/10

#### PATENTS AND PUBLICATIONS

- "KRISHAK" An autonomous IOT System for Field Monitoring and Disease Identification Using Deep Learning.
- · Qualitative Content Analysis in Visual Question Answering based Datasets and Algorithms.

Int'l Journal of high-performance computing and networking Published (Inderscience, IF: 0.71)

• Analysis of Deep Convolutional Neural Networks for Image Classification.

**ICASISET 2019** 

Published (Conference Proceedings.)

Application No: 201941019154

Improvised Framework of Group Signatures with Chameleon Hashes for Online/Offline

**Future Generation Computer Systems** In Review (Elsevier, IF: 5.768)

**Journal of Soft Computing** 

In Review (Springer, IF: 2.784)

**Transactions** · A Reinforced Framework for a Blockchain based Authentic E-Governance System using

### **ACHIEVEMENTS**

Scholarship of Merit – SRM Institute of Science and Technology (July 2015 – July 2017)

Was awarded a scholarship of INR 92500/- for showcasing exemplary overall performance for three consecutive years.

Secure and Private Al Scholarship - Facebook Al (May 2019)

Was among the top 5000 students from all across the globe to be selected as a recipient of the Secure and Private Al scholarship provided by Facebook AI in association with Udacity.

PyTorch Scholarship – Facebook AI (November 2018)

Was awarded the prestigious PyTorch scholarship given by Facebook AI in association with Udacity.

CBSE Board Topper (May 2015)

Chameleon Hashes.

Received appreciation for achieving 95.4% Merit in CBSE Class XII board examinations from Mrs. Smriti Irani, the Then Minister of HRD (Govt. of India).

Best Speaker – 'Digital Signal Processing (2016)

Was awarded the Best Speaker award for the technical talk organized by the Career Development Centre, SRM Institute of Science and Technology.

Swami Vivekananda Quiz – Round II Qualifier (2014)

Was among the Top 1000 students to qualify for the second round of the All India Swami Vivekananda Quiz with the participation of more than 85000 students across India.

Nirmaan Enterprises – 'Best Business Idea in Asia Pacific' (2013)

Was the co-founder of 'Nirmaan Enterprises' that was adjudged as 'The Best Business Idea in Asia Pacific' by the British Council with a prize money of **1000 USD**.

# **LANGUAGES**

English, Hindi, Punjabi, German (beginner level).

#### **EXTRA-CURRICULAR ACTIVITIES**

1<sup>st</sup> Prize – KHALBALI (Inter College Street Play Competition)

An International Sports and Cultural Festival – RIVIERA 2017 held at VIT University (Vellore), India.

2<sup>nd</sup> Prize – Variety Show (Inter College Street Play Competition)

An Intercollegiate Cultural and Fine Arts Meet held at Jawaharlal Institute of Post Graduate Medical Education and Research (JIPMER), Pondicherry, India.