PRATEEK RALHAN
https://prateekralhan.github.io

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+91-8826549607

| Work Experience | : **6+** Years |
| Research Experience: | **2+** Years |

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 **GenAI ethics** as a part of **Fair, Transparent and Accountable AI 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 f r a m e w o r k 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%**.

Technical Intern   Schneider Electric   **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 Studio
- **Others** - GitHub, Docker, Flutter, Adobe Photoshop, Adobe Premiere Pro.

EDUCATION

Bangalore, India   BITS Pilani   **April 2024 – *ongoing***

- **M. Tech.** in **Machine Learning and Artificial Intelligence**   CGPA: - /4

Bangalore, India   IIIT Bangalore   **August 2019 – October 2020**

- **Post Graduate Diploma** in **Machine Learning and Artificial Intelligence**   CGPA: 3.3/4

Chennai, India   SRM Institute of Science and Technology   **July 2015 - May 2019**

- **B.Tech.** in **Electronics and Communication Engineering.**   CGPA: 9.2/10

PATENTS AND PUBLICATIONS

- "KRISHAK"- An autonomous IOT System for Field Monitoring and Disease Identification Using Deep Learning.

  Application No: 201941019154

- 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.)

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

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

- A Reinforced Framework for a Blockchain based Authentic E-Governance System using Chameleon Hashes.

  Journal of Soft Computing
  In Review (Springer, IF: 2.784)

CLOUD CERTIFICATIONS

- **Palantir Foundry Certified Data Engineer - Professional**
- **Palantir Foundry Certified Data Engineer - Associate**
- **Palantir Foundry Certified Application Developer – Associate**
- **Palantir Foundry Certified Data Analyst**
- **Microsoft – Azure Fundamentals**

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 AI Scholarship - Facebook AI (May 2019)**
  Was among the top 5000 students from all across the globe to be selected as a recipient of the Secure and Private AI 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)**
  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

- **1st Prize – KHALBALI (Inter College Street Play Competition)**
  An International Sports and Cultural Festival – RIVIERA 2017 held at VIT University (Vellore), India.
- **2nd 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