Rishabh Bassi

Education

Texas A&M University

Aug 2022 - May 2024

Master of Science in Computer Science, Specialization in Machine Learning CGPA 4.0

College Station, Texas

Thapar University

Aug 2015 - Jun 2019

Bachelor of Engineering - Computer Science, Specialization in Machine Learning CGPA 9.62

Patiala, Punjab

Experience

LinkedIN

May 2023 – Aug 2023

Summer Software Intern | Automation, ML, Python, System Design, Full-Stack, SQL Mountain View, California

• Designed and Implemented a Real-Time Automation framework in MYSQL to detect and report data discrepancies in COLOS, improving data integrity and system reliability significantly reducing engineers' effort and time by up to 70%.

Texas A&M University

Aug 2022 - May 2023

Graduate Research Assistant | NLP, MPI, PyTorch, GPU/HPRC, C++

College Station, Texas

• Conducted extensive research on SAR data processing bottlenecks for satellite project, achieving 90% performance increase via optimized code, efficient algorithms, GPU utilization, and parallel computing.

Western Digital

Jul 2019 - Jul 2022

Senior Engineer | Firmware, System Design, C++, Backend Development

Bangalore, Karnataka

- Engineered robust Firmware for XOR Error Handling, enabling the successful launch of high-value products generating USD 1-2B in revenue.
- Orchestrated the remodeling of HW Registers Verification in the FW, eliminating redundancies in Validation cycles.
- Achieved Blue Category High performance by optimizing SSD FW with 25% Write-Read CDM Benchmark improvement. Six Months and Summer Internship
 - Diagnostic Framework and Performance Profiling and Optimization: Innovated solution for SSD Firmware to enhance framework, enabling identification and resolution of 90% critical issues during Product Development.

Technical Skills

Languages: Python, Java, C, C++, R, Ruby, Rails, MySQL, HTML, CSS, JS, React, NodeJS, REST

Technologies/Skills: BERT, GIT, TensorFlow, GPT3, Django, Jupyter, GitHub, Bootstrap3, Linux, OpenMP, MPI, Eigen, Pytorch, Flask, AWS, ML, Docker, OpenCV, Keras, LLM, Azure, SSMS, Kafka, Espresso, HDFS, GPU, A/B Test, Kubernetes Relevant Coursework: Algorithms, ML, DS, Natural Language Processing, Software Engineering, Operating Systems, Deep Learning, Data Analytics, Networking, Computer Architecture, Information Retrieval, Cloud/Distributed Systems Developer Tools: VSCode, GCP, Source Insight, Android Studio, RStuido, PyCharm, RubyMine, Bitbucket, Sequel ACE

Projects

Travelix | React, Python, AutoRec, ML: Website

May 2023

• A cutting-edge personalized travel recommendation system enabling users to receive tailored travel suggestions based on their preferences and travel history, enhancing their overall travel experiences.

TA Management Portal | Ruby, Rails, FrontEnd: Website

Aug 2022

• Created a dynamic website optimizing TA application process, improving efficiency and enabling seamless communication between students and administrators.

Political Propaganda Influence using Twitter Sentiment Analysis | Python, NLP, ML: Project Code

Apr 2021

• Predict celebrities influence leveraging SA on retweets providing valuable insights into social media's impact on public.

Humanoid | Python, Natural Language Processing, Image Processing, Raspberry Pi: Project Report

Oct 2018

 Engineered a TensorFlow-powered Humanoid ChatBot with OCR, personalized AI interactions, and interview preparation assistance, demonstrating advanced conversational system capabilities.

Automatic Text Summarization | Django, Python, Front End, Javascript NLP: Project Code

Apr 2018

• Developed a summarization website, enhancing information consumption efficiency & boosting productivity in research.

Achievements

Told Medalist Thapar University - 2018

🏆 Merit Scholarship for Exemplary Academic Performance and National Scholarship Holder Thapar University - 2017-2018

Y Work Level Recognition Awarded for Making it Happen and Doing it Together

Research / Leadership / Extracurricular

- Publication on Autonomous Tagging of StackOverflow Questions using Statistical Methods, Link ICCSIE 2018.
- Publication on Spirochaeta Bacteria Detection Using an Efficient Deep Learning Approach, Link ICCVBIC 2021.
- Research on Applications of NLP to give human-like understanding to Networks under UIUC Professor Matthew, Fall 2021.
- Managed family business Pushap Industries by directing the manufacturing workforce along with coordinating supply chain.
- Executive Member of Pratigya Society to teach underprivileged children, Toastmasters Club at Western Digital.
- Proactive Engagement in Hackathons and Innovation Bazaar organized at Western Digital, Volunteering in NGOs.