# Rishabh Bassi

Software Engineer with 3 years of Experience Texas, USA - 77801

### Education

Texas A&M University

Aug 2022 - Dec 2023

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

Texas A&M University

Aug 2022 – Present

Graduate Research Assistant

College Station, Texas

• Investigating bottlenecks in Data Processing of Synthetic Aperture Radar for Satellites and Optimizing code to fast-track enormous matrix computations using algorithms and parallel computing.

Western Digital Jul 2019 – Jul 2022

Senior Engineer

Bangalore, Karnataka

- Designed Robust Firmware for Error Handling of XOR used in launching products worth USD 1-2B revenue.
- Planned Remodelling of HW Registers Verification in Firmware itself to avoid redundancies in Validation cycles.
- Revised Performance Gaps in Existing SSD FW to meet Blue Category Performance Numbers. Deployed Code with 25% increase in Write-Read CDM Benchmark.

Six Months Internship

Jan 2019 - Jun 2019

• Diagnostic Framework: Enhanced Capability of Framework by adding new diagnostic Paths for SSD Firmware which helped in debugging 90% of issues in crucial stages of Product Development.

Summer Internship

Jun 2018 - Aug 2018

• Performance Profiling and Optimization: Developed a Performance Counter Framework to help developer analyze defects in coding schemes, hence optimizing bottleneck in SSD Firmware.

#### Technical Skills

Languages: Python, Java, C, C++, R, Ruby Web/Database: HTML, CSS, Javascript, SQL

Skills/Relevant Coursework: Algorithms, Machine Learning, Natural Language Processing, Software Engineering,

Operating Systems, Deep Learning, Data Analytics, Computer Architecture, Discrete Mathematics

Developer Tools: VS Code, Source Insight, Android Studio, RStuido, PyCharm, RubyMine, MSOffice, Bitbucket

Technologies/Frameworks: OpenMP, Django, Jupyter, GitHub, Bootstrap3, WordPress

## **Projects**

**TA Management Portal** | Ruby, Rails, FrontEnd : Project Code

 $\mathbf{Aug}\ 2022$ 

• Provides a portal for student applications for TA positions in the computer science department.

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

Apr 2021

• Predict influence of celebrities during elections leveraging sentiment analysis on Retweets of followers.

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

• Build a Humanoid to function as a ChatBot deploying TensorFlow; Identify objects using OCR, perform functions such as Personalized AI and help in interview preparation.

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

Apr 2018

Created website to Utilize Natural Language Processing to summarize webpages or PDF to specified word limit.

## Achievements

**T** Gold Medalist Thapar University - 2018

Y Merit Scholarship for Exemplary Academic Performance Thapar University - 2017-2018

National Scholarship Holder Senior Secondary - 2015

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 manfacturing workforce along with coordinating supply chain.
- Executive Member of Pratigya Society to teach underprivileged children, Toastmasters Club at Western Digital.
- Participation in Hackathons and Innovation Bazaar organized at Western Digital, Volunteering in NGOs.