Rishabh Bassi

Software Engineer with 4 years of Experience California, USA - 94536

Interests

• A results-driven Computer Science Engineer with a proven track record in the software industry, combining technical expertise with a strong drive to bridge the gap between cutting-edge research and practical implementation. Passionate about developing innovative software and machine learning solutions to tackle complex problems.

Education

Texas A&M University

Master of Science in Computer Science CGPA 4.0

Aug 2022 - Present College Station, Texas

Aug 2015 - Jun 2019

Thapar University

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

Patiala, Punjab

Department Rank 9 among 450 students

Experience

LinkedIN May 2023 – Present

Summer Software Intern

Mountain View, California

• Designing and implementing an Real-Time Automation framework in MYSQL to detect and report data discrepancies in COLOS, improving data integrity and system reliability.

Texas A&M University

Aug 2022 - May 2023

Graduate Research Assistant

College Station, Texas

• Investigated bottlenecks in Data Processing of Synthetic Aperture Radar for Satellites and Optimized 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, React, NodeJS

Skills: Git, BERT, Machine Learning, Natural Language Processing, Data Analytics

Developer Tools: VS Code, Source Insight, Android Studio, RStudio, PyCharm, RubyMine, MSOffice, Bitbucket, Sequel ACE, HPRC

Technologies/Frameworks: OpenMP, TensorFlow, GPT3, Django, Jupyter, GitHub, Bootstrap3, WordPress, MPI, Pytorch, Eigen, Multiprocessing

Research Experience

- Publication on Autonomous Tagging of Stack Overflow Questions using Statistical Methods, International Conference on Computer Science, Industrial Electronics, Link ICCSIE Bengaluru 2018.
- Publication on Spirochaeta Bacteria Detection Using an Efficient Deep Learning Approach, International Conference on Computational Vision and Bio Inspired Computing, <u>Link ICCVBIC 2021.</u>
- Research on Applications of NLP to give human-like understanding to Networks Remote Research under UIUC Professor Matthew Caesar, Fall 2021.

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

August 2022

• The app handles the student applications for TA positions in the computer science department with various functionalities of the hiring manager, professor, and student.

Humanoid | Python, Natural Language Processing, Image Processing, Raspberry Pi : Project Report Dec 2018

• 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.

Travelix | React, Python, AutoRec, ML: Website

May 2023

TRAVELIX is a personalized travel recommendation system that provides recommendations to users based on their
preferences and travel history.

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

Nov 2018

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

Data Mining and Analysis Project | R, Data Analytics, ML: Project Code

Apr 2023

• Implemented various ML models and Feature selection techniques to do supervised and unsupervised learning task on huge dataset.

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

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

Tourism Portal | HTML, CSS, Javascript : Project Code

Aug 2018

Apr 2021

 Build a Front End Website portal for tourism highlighting various landmarks, attraction spots, packages and various other items.

Combo Offers Portal | Python, Django, Machine Learning: Project Code

Oct 2017

• Established Web App Management portal for e-commerce websites to display inventory within specified budget.

Employee Management System | Java, Servlets, JSP, DBMS, PL/SQL

Sep 2016

Allows admins to mutate and manage employee details; Allows portal access and management to employees.

Achievements

Told Medalist Thapar University - 2018

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

Tational Scholarship Holder Senior Secondary - 2015

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

Certifications

Summer Industrial Training 2016: Advanced Java Training

Summer Internship 2017: Android App Development

Workplace Training 2020: Python for Scripting, Assertive Communication

MOOC's: Machine Learning A-Z HandsOn, PHP Development, Coursera IOT Course, NLP with Classification and Vector Spaces, Neural Networks and Deep Learning, NLP Essential Training and Advanced NLP, Excel Essential and Advanced Training, Udemy Mastering Data Structures and Algo Course

Relevant Coursework

• Data Structures

• Artificial Intelligence

• Information Storage and Retrieval

• Software Engineering

• Internet Technology

• Algorithms Analysis

• Systems Programming

• Data Mining and Analysis

• Database Management

• Computer Architecture

• Natural Language Processing

• Operating Systems

• Machine Learning

• Distributed Systems and Cloud Computing

Leadership / Extracurricular

- Managed family business Pushap Industries by directing manfacturing workforce along with coordinating supply chain.
- Executive Member of Pratigya Society to teach underprivileged children.
- Participation in Hackathon organized at Western Digital and Innovation Bazaar.
- Volunteering in NGOs such as Akshya Patra, JAZZ HANDS and other individual volunteering activities.
- Member of Hospitality Team to organize Saturnalia Fest 2016.
- Member of Toastmasters Club at Western Digital Model and Model United Nations Participation 2016.
- Hobbies: Travel, Investment, Reading Books, Cooking, Writing Journal, Cinephile, Learning New Language, Badminton, Sports.