

Rishabh Parekh

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EDUCATION

THE UNIVERSITY OF TEXAS BS | ELECTRICAL AND COMPUTER ENGINEERING, HONORS

Junior | May 2022

Cum. GPA: 4.0 / 4.0

COURSEWORK

Software Design I/II/Lab: C/C++/Java
Data Science Principles
Digital Image Processing
Operating Systems
Algorithms
Embedded Systems
Probability and Random Processes
Linear Algebra
Discrete Mathematics

SKILLS

PROGRAMMING

Java Python C++ C
MATLAB HTML5/CSS3 JavaScript
Flask React PyTorch

SOFTWARE TOOLS

Automation Anywhere Linux Git
Autodesk Fusion 360 (CAD Modelling)
Autodesk Eagle (PCB Design)
AWS Cloud ML Arduino Agile (Scrum)

EXTRACURRICULAR

UT SEEK

Mentor for 20 students at local Austin elementary schools to raise awareness of higher education and engineering.

NARNARAYAN DEV YUVAK MANDAL
Houston Chapter Head, increasing weekly turnout 4x by implementing streamlined marketing strategies.

Virtual Camp Director, heading a virtual cultural camp for 500+ attendees from US, UK, AUS, NZ, Canada, and Kenya.

TABLA (SOUTH ASIAN CLASSICAL PERCUSSION INSTRUMENT)

Record, edit, and publish cross-cultural fusion covers of songs on Instagram. Performed at Houston Children's Museum and Houston Miller Outdoor Theater.

EXPERIENCE

FLAPMAX | SOFTWARE ENGINEERING INTERN

Jul 2020 – Aug 2020 | Austin, TX

- Refactored anomaly detection algorithm to run 73% faster while improving modularity using vectorization and caches.
- Innovated on a natural language processing web application using JS, React, jQuery, Python while testing Flask APIs on Postman.
- Designing a front-end for a video analytics dashboard using JS, React, and Ajax.

ENERGY VENTURES PRIVATE EQUITY | BUSINESS ANALYST INTERN

Jul 2019 – Aug 2019 | Houston, TX

- Reported on 900+ clean tech funds' internal rate of returns to plan the firm's objective of diversifying from oilfield services.
- Drafted 45-slide investment memo for a \$6M deal with market research and various financial analyses for Investment Director.
- Created a distribution waterfall (carried interest) model of a \$10M investment, in keeping with the applicable fund terms.

AT&T | SOFTWARE ENGINEERING INTERN

Jun 2017 – Aug 2017 | Houston, TX

- Reduced costs by \$2,450 (6%) with Robotic Process Automation to cutting cycle time by 35 hours, increase client focus, and decrease processing errors.
- Streamlined client feedback by merging organization's 2 sites to enhance the user's experience.
- Accurately merged two data-tracking systems by inspecting a 500K-point data set to reduce bot-history conflicts.

PROJECTS

SAFETY DEVICE EXTENSION FOR CHEVRON

Python, PyGame Graphics

- Devised and programmed a model for Chevron to direct at-risk employees away from a gas leak to the nearest uncontaminated safe-spot.
- Adopted by Chevron for 2020-2021 project with \$850K in requested funding.

AIRTOUCH

Python, OpenCV, Haar Cascade Classifier - Code [↗](#), Demo [↗](#)

- Designed a real-time virtual whiteboard using depth camera, Haar Cascade Classifier, and principle digital image processing.
- Received the *Ram's Horn Best Project Award* for digital image processing class.

POKÉDEX USING MACHING LEARNING

Python, PyTorch, Fast.ai, Flask, Flutter - Code [↗](#), Demo [↗](#)

- Developed a image classifier to detect and show details of the four classic Pokémon with 98.2% accuracy.
- Deployed model in both a web application form and an Android mobile application form.

SPACE SHOWDOWN VIDEO GAME

C++, TM4C Microcontroller, LCD Display, DAC, ADC - Code [↗](#), Demo [↗](#)

- Soldered and programmed a handheld, 2D multiplayer shooting game integrating both hardware and software.
- Recognized by Professor and TAs, receiving *2nd place* in the class for game design and implementation.