

Education

Purdue University, IN (Major: Comp Sci, GPA 3.54)

Dec 2022 (expected grad.)

- Relevant Courses: Data Structures and Algorithms, Computer Architecture, Systems Programming, Artificial Intelligence, Data Mining and Machine Learning
- Made the Dean's List
- Extracurriculars: Purdue Hackers Club, Robotics Club (computer vision), Tennis, Music

Experience

Research in ICS, Purdue University

May – Aug 2021

- Worked on a research based on improving the automation of industrialized controlled systems
- Read various research paper to get a knowledge of what research is like
- Made an extensive presentation which summarizes what the research is about
- Provided with potential ideas to make ICS-Guard more efficient.

Undergraduate Teaching Assistant, Purdue University

Jan – May 2021, Aug – Dec 2021, Jan – May 2022

- Been chosen as a UTA for System programming course for 2 consecutive semesters
- Used problem solving to help students with their issues in programming assignments
- Taught concepts and cleared any misconceptions/difficulties students may face
- Learned new and interesting ways/approaches through which a problem can be perceived

IT Intern, Mudra Finvest Pvt. Ltd.

July – Aug 2020

- Created an application to calculate and detect a currency arbitrage
- Developed push notifications for the team to indicate an opportunity for currency arbitrage
- Synchronized with real-life currency rates
- Used Excel macros and Net Beans Java to implement solution
- Based on Bellman-Ford's Negative Weight Cycle principles

Projects

2Clicks, an Application for the Indian Government

May – Aug 2021

- I developed an application for the citizens of Ahmedabad
- It enables people to report any incident or problem with just 2 clicks
- It includes a tracking system(like the food tracking system) to track the work done by the government
- It has additional features such SOS(button), and other functionalities
- Application is made to take a step towards smart cities
- It also has an AI which determines the order in which reports are handled.

Automated Pac-Man(Python)

Aug – Dec 2020

- Built an automated Pac Man game using python
- Worked on the automated Pac Man Project by Berkeley
- Learnt different search methods including A*, depth-first, breadth-first, uniform-cost
- Also learnt about reflex agent, alpha-beta pruning
- Got a pretty good understanding of reinforcement learning and probabilistic inference

Developed an algorithm to detect fake reviews on ecommerce website

Jan 2021 - May 2021

- Cleaned the dataset provided in .csv file
- Explored different classifiers such as: SVM, Linear Regression, Random Forest
- Learnt the usage of TDIF vector to analyze the textual aspects of the data
- Also learnt the usage/importance of one-hot encoding to convert categorical data
- Grid Search was used to set the optimum parameters for the respective classifiers

Internal Assessment for Mathematics

Aug 2016 – Feb 2018

- Demonstration of knowledge in the Internal Baccalaureate Mathematics/CS curriculum
- Explored a branch the P=NP problem – the knapsack problem
- Accomplished by writing a program for a giving problem to solve it using brute force

Skills

- **Languages:** Python, Java, C, Julia, Bash, Scala
- **Tools & Frameworks:** IntelliJ, PyCharm, Bluefish, Visual Studio, GitHub, GNU Debugger, Junit