

# Aniruddha Patil

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## Education

Indiana University Bloomington

Master of Science in Computer Science - GPA: 3.73

Dec 2020

International Institute of Information Technology

Bachelor of Technology in Computer Science and Engineering (Honors in Computer Vision)

May 2019

## Experience

Urspace Labs

Engineering Fellow

July 2020 - present

- Spearheaded a team of engineers through product development of TrendBend, a community-based habit development progressive web application to help users maintain a desired lifestyle.
- Built using a variety of technologies such as React, Node, Firebase, and MongoDB.

Intel

Machine Learning Intern

June 2018 - July 2018

- Conducted and presented an extensive survey on joint object detection and pose estimation methods harnessing monocular vision as a research paper. Accepted to the MATEC Web of Conferences (JCMME 2018).

Froogal.ai

Software Development Intern

May 2017 - July 2017

- Developed the Froogal app, a digital loyalty program enablement application for businesses in React Native.
- Launched on the Google Play Store (10k+ downloads) and the Apple App Store.

## Projects

Airavata – Apache Foundation

2020

- Integrated Google Drive support into the Managed File Transfer component of Airavata, a distributed computing platform for large-scale applications, adding to cloud storage options of applications powered by Airavata.
- Leveraged Google Drive's Service Account API, Consul, gRPC, and Spring Boot.

AhaEvent – Forksociety

2020

- Architected a Firestore solution for AhaEvent, an open-source platform showcasing a curated list of technology events.
- Established CI/CD pipelines in Python to automate serverless interaction with Firestore upon incoming contributions.

Distributed Tic-Tac-Toe and chatrooms

2019

- Created a distributed Tic-Tac-Toe game in a client-server setup leveraging the Java RMI protocol.
- Parallelized game server to handle multiple games, along with a chat server for multiple clients/client groups.

Computer Vision and Machine Learning projects

2018

- Implemented a music genre classification system involving ML techniques such as random forests, k-means, k-nearest-neighbors, neural networks, Gaussian mixture models, and support vector machines.
- Developed a Python application for colorizing comics automatically by incorporating various shading techniques (flood fill, stroke-preserving, and pattern-shading) based on intensity, continuity, and pattern of strokes.

Data Annotation Tool – Microsoft Research India

2017

- Delivered an annotation portal, facilitating the annotation of the 1.2TB sized proprietary HAMS video dataset.
- Built using React, Express, and MongoDB, reducing annotation time by 60% to aid driver assistance systems research.

## Technical Skills

- **Programming Languages:** C++, C, Python, Javascript, Java, SQL, HTML, CSS3.
- **Frameworks and Libraries:** React, Node, React Native, Agile, Scrum, Docker, Unity, Firebase.
- **Relevant coursework:** Software Engineering, Operating Systems, Distributed Systems, Database Systems, Data Structures, Algorithms, Principles of Programming Languages, Computer Architecture, Computer Networks, Artificial Intelligence, Computer Graphics, Digital Image Processing.