

Anirudh Prabakaran

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EDUCATION

- MS in Computer Science** | Georgia Institute of Technology | GPA: 4.0/4.0 Aug 2021 — May 2023
- **Specialization:** Machine Learning
 - **Courses:** Intro to Grad Algorithms, Computer Vision, Machine Learning, Natural Language
- B.Tech in Computer Science** | National Institute of Technology - Tiruchirappalli | GPA: 8.18/10.00 Jul 2014 — May 2018
- **Courses:** Data Structures and Algorithms, Operating Systems, Database Management Systems, Computer Networks.

WORK EXPERIENCE

- Georgia Institute of Technology** Aug 2021 — May 2022
Graduate Teaching Assistant | College of Computing Atlanta, GA
- Instructor for CS4400 Intro to Database Systems (Fall 2021, Spring 2022).
- Iron Mountain** Sep 2020 — Jun 2021
Machine Learning Engineer | Insight Bangalore, India
- Involved in research and implementation of solutions in Document Understanding (splitting, classification, entity validation/extraction). Actively participated in weekly meetings to present latest papers and demonstrate prototypes.
 - Designed and engineered a human-in-loop, event-driven pipeline on GCP to process documents using in-house models. By not relying on Cloud AI APIs, we saved significant costs to the company and also helped replicate the architecture to other verticals.
- Samsung Research Institute Bangalore** Jun 2018 — Aug 2020
Senior Software Engineer | IoT Products and Platforms Bangalore, India
- Contributed to research, commercialization and debugging of Home Monitoring solutions integrated with SmartThings.
 - Spearheaded a research proposal to identify anomalous segments from surveillance videos. Used C3D to extract spatiotemporal features from video segments and fed them into a CNN to assign regression scores. Presented this publication in a conference. [link]
 - Developed an SDK for IoT devices enabling p2p communication using WebRTC with a team of 8 members. By avoiding servers during streaming, this SDK helped to significantly lower latency and reduce server costs.
 - Received a spot award for developing an emergency home audio monitoring engine, targeting common household sounds. This solution was successfully ported in our home assistant and demonstrated during a workshop at HQ, Korea. [link]
 - Finalist in an internal hackathon among 100+ teams for building and prototyping a chatbot to boost employee productivity. It had the ability to keep track of tasks, learn simple daily actions and execute them again in a user-friendly chat interface. [link]
 - Awarded the Samsung professional certification for strong algorithmic competency, given to engineers globally.

ACTIVE PROJECTS

- Exploratory Video Analytics** [link] 2022
- EVA is a visual data management system. It supports SQL-like syntax and many commonly used computer vision models.
 - Built with Python, Petastorm, (storage), PySpark (execution), PyTorch (CV/ML) and SQLite (underlying DB).
 - Working with the Georgia Tech DB research group under Prof. Joy Arulraj, primarily contributing from the ML side.
- Jinglecraft - Music Recommendation**[link] 2022
- Using a combination of metadata and content-based approaches for Genre/Mood Classification, Tag Prediction etc.
 - End goal is to build an interactive, user-friendly recommendation tool using the above trained models.
- Cricboard** [link] 2021
- Built a statistics website targeted towards fantasy players, to visualize interesting cricket insights in an interactive and dynamic UI.
 - This webapp was made with Python, Streamlit and hosted with AWS. Data was scraped from cricinfo and cricsheet.
 - Gathered 30k+ page hits on the opening day of IPL and received a daily average of 2k hits during the tournament.

TECHNICAL SKILLS

Programming Languages Python, C++, SQL
Frameworks and Tools PyTorch, Docker, Git

VOLUNTEER AND EXTRA-CURRICULAR

- **Teaching Volunteer, Make a Difference:** Taught classes weekly for school kids belonging to various shelters in Bangalore. [link]
- **Head, Publicity Team, College Cultural Fest:** Headed a team of 50 members, to increase brand value and participation for the fest.
- **Department Coordinator, College Sports Fest:** Managed participation and activities of the CS department during the fest.
- **Web Developer, College Coding Club:** Involved in development of various internal projects, events and mentor-ship programs.
- **Sports Contingent:** Represented college in the Chess team, and the department in Cricket and Soccer.