

ANANYA SURAJ

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EDUCATION

University of Massachusetts Amherst

May'18

Master of Science in Computer Science | **GPA: 3.88**

Coursework: Distributed and Operating Systems, Database Design and Implementation, Systems for Data Science, Information Retrieval, Deep Learning, Advanced Algorithms, Machine Learning

Nitte Meenakshi Institute of Technology, Bangalore, India

Aug'12 - May'16

Bachelor of Engineering, Computer Science | **GPA: 9.21/10** (Ranked 6th out of 256 students)

Coursework: Operating Systems; Databases; Algorithms; Computer Networks; Compiler Design

PROFESSIONAL EXPERIENCE

Technology Analyst Intern - Enterprise Platforms, Goldman Sachs, Jersey City

May '17 - Aug'17

- Developed the user interface in ReactJS, CSS, and HTML for a web service that automates provisioning Hadoop resources across the firm.
- Worked on functional specifications and validations with APIs using a Python Django REST Framework to create and modify orders for resources like Hadoop Directory File Systems, HBase Databases and Yarn Compute Clusters.
- Improved the time taken for provisioning resources from ~2 weeks to a few seconds thereby improving the user experience and reducing operational overheads.

Project Intern - Indian Institute of Science, Bangalore, India

May'15 - May'16

- Analyst and developer on 'Smart Jewelry for Personal Safety', a bracelet designed for the safety of women that performs emergency detection and authority notification.
- Collected and analyzed data to design a motion tracking algorithm to differentiate forceful push, drag or jerk movements from regular ones.

PROJECTS

Distributed File and Graph Processing

Oct'17-Dec'17

- Designed a distributed multi-processing server to distribute large workloads across machines in a fault tolerant manner and processed tasks according to the MapReduce paradigm.
- Also implemented Pregel, a distributed graph processing system to process large graphs in memory.

Distributed Home Automation System

Jan'17-May'17

- Simulated a distributed network of virtual devices to develop a smart home system.
- Using RPCs for communication, the devices worked seamlessly with clock synchronization, fault tolerance, event ordering, consistency and consensus protocols.

Identifying Relatedness in Web Tables to Perform Cell Search

Jan'17-May'17

- Designed and developed a novel approach to perform cell search in a large corpus of web tables by identifying those that can be unioned or joined.
- Improved search response time and accuracy by using an iterative framework that finds results for a user's natural language query.

Career Path Analysis with Topic Models - Independent study with Prof Andrew McCallum

Jan'17-May'17

- Worked on a workforce analytics problem to predict the career trajectories of individuals.
- Built a probabilistic generative model using Latent Dirichlet Allocation and Hidden Markov Models to predict the next logical stage in an individual's career based on his resume.

Movie Revenue Prediction using Pre and Post Release Data

Oct'16-Dec'16

- Developed a pipeline to predict box-office revenues based on pre and post release data (scraped from Rotten Tomatoes, IMDb, TMDb) using various regression models.

Online Shopping Portal

Jan'15 - May'15

- An e-commerce web application built using Java, SQL, HTML, CSS and JavaScript.

TECHNICAL SKILLS

- **Programming Languages:** Java; Python; C++; C
- **Data Science and Machine Learning Tools:** Python libraries - Scikit-learn, NumPy, Pandas
- **Web Technologies:** ReactJS; JavaScript; CSS; HTML; Bootstrap
- **Databases & Frameworks:** Hadoop, PostgreSQL, MySQL, SQLite
- **Certificate of Proficiency in Java** from Oracle's Workforce Development Program

ACHIEVEMENTS & ACTIVITIES

- GHC 2017 Scholar - awarded by The Anita Borg Institute.
- Social Chair - CSWomen - an organization to promote the representation and interest of women in CS.
- Raised funds for Chittadhama, a rehabilitation center for homeless people with mental illness.