Rachit Chadha

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Education

Georgia Institute of Technology

Expected Dec. 2024

Master of Science in Computer Science (GPA 3.87)

Atlanta, Georgia

University of Maryland

May 2020

Bachelor of Science in Information Science

College Park, Maryland

Relevant Coursework

• Database Systems

- Deep Learning
- Computer Vision
- Visual Analytics
- Data Science

- Data Structures
 - Machine Learning
- Natural Language
- Web Applications
- Cloud Computing

Technical Skills

Languages: Python, JavaScript, SQL, HTML/CSS

VS Code, PowerBI, Tableau, AWS Redshift, AWS Athena, GCP, Microsoft Azure ML, Spark, Docker Dev Tools:

Frameworks: PyTorch, Pandas, NumPy, REST, Git, TensorFlow, Sci-kit-Learn, MongoDB, Flask, Node, is

Experience

Graduate Teaching Assistant

Present

Georgia Institute of Technology

Atlanta. GA

• Graduate TA for 200+ students in CSE 6242 Data & Visual Analytics co-leading the campus operations under Prof. Duen Horng (Polo) Chau and Dr. Mahdi Roozbahani.

Data Engineer Co-Op

May 2024 - Aug 2024

Turner & Townsend

New York City, NY

- Developed stored procedures using Oracle PL-SQL to facilitate efficient & optimal migration of data to a new database.
- Utilized Python & predictive models for data extraction and transformation to forecast completion of individual assets.
- Collaborated with cross-functional teams to delivering actionable insights utilizing dynamic PowerBI dashboards.

Data Analyst II

Apr 2022 - Jun 2023 New York City, NY

AMCL

• Engineered an ETL pipeline & dynamic dashboards, enhancing asset management, impacting over 116K NYC residents.

- Utilized Python, PL-SQL, and PowerBI to design statistical metrics for live monitoring of asset performance and costs.
- Automated real-time data extraction using BS4, sk-learn, & MongoDB, focusing on climate data to predict impacts.

Research Assistant

Aug 2019 - May 2020

University of Maryland

College Park, MD

- Developed an analytics engine playable case study at University of Maryland's HCI Lab with Dr. Elizabeth Bonsignore.
- Utilized Git, Python REST & MySQL to devise a learning analytics system integrating it to the University's AWS cloud.

Analytics Intern

May 2019 - Aug. 2019

Intel

Singapore

- Utilized Python, Twitch API and PowerBI to scrape, analyze and visualize data from the APAC eSports industry.
- Collaborated with UX and marketing teams of APJ and ANZ to audit the digital marketing content of Intel products on 13 specialty accounts for A/B testing via HTML/CSS, JavaScript and SEO strategies.

Projects

Project Tidal Web App | JavaScript, Python, MongoDB, Node.js, PySpark

Feb. 2024

- Real time site identification tool: Awarded overall winner at Georgia Tech Hackathon amongst 1100+ participants.
- Utilized geospatial analytics to forecast tidal power as a key to curbing rising energy costs and emissions.

Multimodal Sketch to Image Generation | PyTorch, TediGAN, TextCLIP, ControlNET

Dec. 2023

- Developed a multimodal pipeline integrating sketches and textual descriptions for high-fidelity facial image generation.
- Engineered a novel one-shot diffusion model improving accuracy and detail, enhancing forensic and creative applications.

DataCleaner Python Library | Pandas, NumPy Sk-Learn, SciPy, Seaborn

Oct. 2023

- Developed an automated data pre-processing library for mechanistic Data Cleaning & Interestingness based Pruning.
- Authored a research paper that elaborates on its capabilities in managing missing data, outliers, and encoding features.