

# RACHIT CHADHA

☎ 240-554-7989 ✉ [rchadha33@gatech.edu](mailto:rchadha33@gatech.edu) [in rachitchadha](https://www.linkedin.com/in/rachitchadha) [gh rchadha33](https://github.com/rchadha33) [rachit-chadha.github.io](https://rachit-chadha.github.io)

## Education

### Georgia Institute of Technology

*Master of Science in Computer Science (GPA 3.87)*

**Expected Dec. 2024**

*Atlanta, Georgia*

### University of Maryland

*Bachelor of Science in Information Science*

**May 2020**

*College Park, Maryland*

## Relevant Coursework

- Database Systems
- Data Structures
- Deep Learning
- Machine Learning
- Computer Vision
- Natural Language
- Visual Analytics
- Web Applications
- Data Science
- Cloud Computing

## Technical Skills

**Languages:** Python, JavaScript, SQL, HTML/CSS

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

**Frameworks:** PyTorch, Pandas, NumPy, REST, Git, TensorFlow, Sci-kit-Learn, MongoDB, Spark, Flask, Node.js

## Experience

### Graduate Teaching Assistant

*Georgia Institute of Technology*

**Present**

*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

*Turner & Townsend*

**May 2024 – Aug 2024**

*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

*AMCL*

**Apr 2022 – Jun 2023**

*New York City, NY*

- 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

*University of Maryland*

**Aug 2019 – May 2020**

*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

*Intel*

**May 2019 – Aug. 2019**

*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.