Rachit Chadha

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Education

Georgia Institute of Technology — **Expected Dec. 2024**
Master of Science in Computer Science (GPA 4.0) — *Atlanta, Georgia*

University of Maryland — **May 2020**
Bachelor of Science in Information Science — *College Park, Maryland*

Relevant Coursework

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

Experience

Turner & Townsend AMCL — **Apr. 2022 – Jun. 2023**
Technical Consultant - Data Engineering & Analytics — *New York City, NY*
- Independently created ETL pipeline & deployed dynamic dashboards as a one-stop-shop product improving NYC Housing Authority's $3.1M asset management capabilities affecting 116,000 residents.
- Incorporated scripts using Python, PL-SQL and PowerBI DAX for designing statistical metrics to track real time asset outage, performance & cost, generating valuable insights.
- Utilized BS4, Scikit-learn, Pandas and MongoDB to automate real time scraping of precipitation information & IBM Maximo data to predict impacts and cluster asset condition information into simiarity groups.

University of Maryland — **Aug. 2019 – May 2020**
Research Assistant — *College Park, Maryland*
- Assisted in development of an analytics engine playable case study at University of Maryland's HCI Lab with Dr. Elizabeth Bonsignore and Dr. Phil Piety, funded by the National Science Foundation.
- Worked with Python REST API, HTML/CSS, JavaScript & MySQL to devise a learning analytics system integrating it to the University's AWS cloud infrastructure.
- Collaborated with BYU university using Git version control and presented research on game mechanics & data collection.

Intel — **May 2019 – Aug. 2019**
Analytics Intern - eSports — *Singapore*
- Presented analytical insights to formulate a data-centric strategy for Intel Extreme Masters Sydney 2020, aiming to expand its engagement with the 40 million eSports audience in the Asia Pacific region.
- 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* — **Feb. 2024**
- Awarded overall winner at Georgia Tech Hackathon amongst 1100+ participants.
- Developed a real time site identification tool for tidal energy to enhance wave energy adoption and reduce emissions.
- Utilized geospatial computation and analytics to revolutionize energy economics, forecasting tidal power as a key to curbing rising energy costs and emissions.

Inter-Language Font Style Transfer | *PyTorch, OpenCV, CycleGAN, Pix2Pix* — **Dec. 2023**
- Developed a computer vision based model to translate visual text within the real world and other media, preserving the original style, color, and font of the text.
- The inspiration comes from watching anime and noticing untranslated environmental text such as billboards limiting immersion. This model was developed to bridge that gap enabling complete text accessibility.
- Utilized GAN models like Pix2Pix and CycleGAN for style transfer between Japanese and English characters, achieving seamless integration into the original media.

DataCleaner | *Pandas, NumPy Sk-Learn, SciPy, Seaborn* — **Oct. 2024**
- Developed an easy to use data pre-processing tool for automated Data Cleaning & Interestingness based Pruning in ML.
- Published a research paper that elaborates on its capabilities in managing missing data, outliers, and encoding features.

Technical Skills

Languages: Python, JavaScript, SQL, HTML/CSS
Developer Tools: VS Code, PowerBI, Tableau, AWS Athena, Microsoft Azure ML, Spark
Technologies/Frameworks: Pandas, PyTorch, REST, Git, Numpy, tensorflow, Scikit-Learn, MongoDB, Flask, OpenCV