CHIDANAND TRIPATHI

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EDUCATION

University of Wisconsin-Madison   **Sep. 2020 – May 2024**
Bachelor of Science, Computer Science and Data Science   *Madison, WI*
- Cumulative GPA: 3.6/4.0 [Dean's List Award]

EXPERIENCE

Apple   **Feb. 2023 – Sep. 2023**
Software Engineer Intern   *Cupertino, CA*
- Developed a RF design validation setup and workflow used for validating Bluetooth protocols in 500,000+ Apple devices in mass production everyday, using C for OS-hardware integration and Python for developing validation algorithms.
- Improved reporting accuracy of crucial Bluetooth metrics and KPIs by 20% on Apple devices in prototype phase by debugging firmware issues, identified by analyzing RF performance data collected from the design validation setup.
- Optimized the runtime of a BT KPI extraction infrastructure module by upto 80 times, used by various internal teams.

Syneos Health   **May 2022 – Jan. 2023**
Data Science Intern   *Morrisville, NC*
- Developed a Project Management Tracker for 25,000+ projects using data extracted from a PostgreSQL database.
- Constructed a data ingestion pipeline using Python on Databricks and then migrated it into a SharePoint list.
- Trained probabilistic and classification models using Python and scikit-learn, by calculating weighted averages of features to predict project categories with a 90% accuracy for 8,000+ projects with incorrect categorization.

UW Health   **Dec. 2021 – May 2022**
Software Developer Intern   *Madison, WI*
- Developed clinical tools using MATLAB for radiation therapy treatment to improve quality and efficiency.
- Compiled CT images, contours, and treatment plans of 300+ patients with MIM Maestro and labelled them.
- Developed an auto-contouring and segmentation software for female breast cancer treatments with at least 85-90% accuracy for clinical use using various models built in Python and scikit-learn.

University of Wisconsin-Madison   **Sep. 2021 – Sep. 2022**
Undergraduate Teaching Assistant   *Madison, WI*
- Mentored and taught basics of data programming from scratch using Python to a class of 1,100+ students.
- Troubleshooted problems in office hours and lab sessions and guided students through the debugging processes.
- Designed, and refreshed 10+ data visualization, plotting and processing projects and exams for the course.

Intellio Consulting   **May. 2021 – Aug. 2021**
Data Science Intern   *New Delhi, India*
- Built models to extract keywords from 500+ listings using NLP techniques, and analytics for the CRM team.
- Implemented and deployed to production, a real-estate image classification model using EfficientNetB5 in Python to classify images posted with listings for better accessibility, with an accuracy of 90% on 6 different classes.

PROJECTS

Distonks | *Python, C, PostgreSQL, Docker, AWS, Git*   **Jul. 2022**
- Built a Discord bot with 100,000+ users that simulates a decentralized stock market and trading system, controlled by the users, written in Python and PostgreSQL using object-oriented and asynchronous programming practices, including a custom low level caching system written in C designed to balance load on integrated external APIs.

Wisco Course Lookup | *Java, Python, Git, pandas, matplotlib*   **May 2021**
- Developed and designed an application for course lookup and suggestions used by 500+ students, based on processed data for over 10,000 courses scraped from the registrar's website, with a CLI, and GUI implementation version in Java.

SKILLS

Languages: Python, Java, C, Objective-C, SQL (PostgreSQL, MySQL), HTML/CSS, R, MATLAB
Libraries and Frameworks: pandas, NumPy, Matplotlib, Sckikit-learn, TensorFlow, Flask, JUnit
Developer Tools and Platforms: Shell, Git, Docker, AWS, JIRA, Databricks, Power BI, Linux, macOS, Windows

LEADERSHIP

North American Association of Indian Students, UW-Madison   **Jun. 2021 – Present**
President   *Madison, WI*
- Founded and leading the UW-Madison chapter of North American Association of Indian Students with 250+ members.
- Fostering a digital and physical community of 800,000+ young Indian professionals across the United States and Canada.