Pramod Anandarao

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EDUCATION

University of Wisconsin-Madison **Madison, WI | 2022 - 2026**

- *Computer Science B.S., Mathematics B.S., Political Science B.S.*
- Relevant Coursework: Algorithms, Artificial Intelligence, Operating Systems, Big Data Systems, Computer Vision, Virtual Reality, UI/UX Development, Combinatorics, Modern Algebra I-II, Real Analysis I-II, Topology.

RESEARCH AND PROJECTS

Informatics Skunkworks Lab **Madison, WI | September 2024 - Present**

Undergraduate Research Assistant

- Project title: "Optimizing Rate of Return from Donation Campaigns using Machine Learning Modeling and Feature Analysis."
- Collaborate with River Food Pantry to provide insights into factors that may impact donation campaigns with the goal of providing key takeaways for optimizing future campaigns.
- Develop tree-based models using scikit-Learn and use PyTorch to create neural networks based on TabNet to predict recurring donors.

AI Approach to Legislative Bill Outcome Prediction **Rochester, MN | June 2024 - Present**

Independent Researcher

- Developed a neural network using TensorFlow to predict whether a bill introduced in the House of Representatives will pass.
- Used the congress.gov API to retrieve text, summaries, and actions on roughly 10,000 bills introduced in the House during the 117th Congress to build the dataset.

Directed Reading Program in Harmonic Analysis of Boolean Functions **Madison, WI | September 2024 - December 2024**

Undergraduate Research Assistant

- Paired with mathematics Ph.D. student to perform research in the areas of analysis of boolean functions and computational learning theory.
- Tasked with delivering 12 minute oral presentation to audience of university math department faculty and graduate students.

Madison Experimental Mathematics Lab **Madison, WI | January 2024 - May 2024**

Undergraduate Research Assistant

- Project title: "Explaining Congruences in Character Tables."
- Worked ten hours per week, collaborating with peers to develop programs in addition to preparing and giving presentations.
- Wrote Python and Rust programs to generate groups of signed permutation matrices as large as 9-by-9 and to search for congruences modulo prime powers in the character tables of these groups.

Exploring Racial Inequality in Online Social Network Structure **Madison, WI | August 2023 - December 2023**

Undergraduate Research Assistant

- Collaborated closely with mentor to analyze large volumes of Chicago Twitter data, utilizing R for data processing and sentiment analysis to identify key trends and patterns in data.
- Executed large-scale computational jobs on university's computing cluster using Slurm Workload Manager.

LEADERSHIP AND VOLUNTEERING

Intercollegiate Programming Contest (ICPC) **Madison, WI | September 2022 - Present**

Competitor

- Attend and participate in weekly club meetings to prepare for worldwide algorithmic programming contest using C++.
- Organized 3 member team to compete on behalf of the University of Wisconsin-Madison at 2023 regional competition among 116 teams.

K-12 Computer Science Club **Madison, WI | January 2024 - May 2024**

Instructor

- Taught 2 weekly after-school computer science clubs in Scratch programming language to elementary school students in Madison area.
- Spoke with fellow club leaders to create lesson plans, encourage student engagement, and foster student interest in computer science and math.

HONORS AND AWARDS

Claude and Dora Richardson Engineering Freshman Scholarship Fund **2022**

National Merit Scholarship Semifinalist **2022**

SKILLS

Technical Skills: **C**, **C++**, **Python**, **Rust**, **CUDA**, **machine learning** (experience with **TensorFlow**, **PyTorch**, and **Burn**), **Java**, **JavaScript**, **R**, **Hadoop Distributed File System**, **Apache Spark**, **Apache Cassandra**, **SQL**, **MySQL**, **gRPC**, **React**, **React Native**, **Node.js**.
Languages: **English** (native), **Telugu** (proficient), **Latin** (basic).