

Gautam Agarwal

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EDUCATION

University of Wisconsin-Madison | Madison, Wisconsin

[May '23]

Bachelor of Science - Computer Science & Data Science

GPA: 3.98/4.0

- Awards: L&S Scholarship Fall 2021, Summer Study Scholarship 2020, Summer Internship Scholarship 2020, Dean's List
- Coursework: Algorithms, Matrix Methods in Machine Learning, Data Structures (Java), Machine Organization & Programming (C), Data Programming (Python), Data Modelling (R), Data Ethics, Data Science in Wisconsin

PROFESSIONAL EXPERIENCES

Enterprise Integration Intern, DOIT @ UW-Madison | Madison, Wisconsin

[Jan'21 - Present]

- Help integrate IT systems and data across the UW, work with modern DevOps technologies and cloud platforms
- Participate in UW initiatives across a variety of domains, transfer systems integration to new Platforms: Informatica, AWS, & Apigee

Undergraduate Teaching Assistant, COMP SCI 320 @ UW-Madison | Madison, Wisconsin

[Jan'21 - Present]

- Develop course content: debugging exercises and projects
- Guide students throughout the course during office hours and weekly group mentoring sessions

AI & Computer Vision Intern, CamfyVision Innovations | Bengaluru, India

[May'20 - Sep'20]

- Designed and developed products through Data Collection, Inference Engine Coding, Model Training & Testing to cater client needs
- Products included Face Mask Detection, Social Distance Detection, Employee Detection, Solar Cell Detection, and Helmet Detection

Project Intern, The Tata Power Company Ltd. | Mumbai, India

[Jul'18 - Oct'18]

- Designed a PHP-based web application to monitor hydroelectric dam health
- Displayed various parameters including flow rate, reservoir volume, gate integrity on a dashboard

SELECTED PROJECTS

ProjectX, Team: UW-Madison

[Sep '20 - Jan '21]

- Represented the university in an International Machine Learning Research Competition to tackle Climate Change
- Compared several deep learning methods to predict the air quality impact of wildfires in Northern California

Blind Man's Bluff

[HackMIT 2020]

- Built a mobile application in flutter to help people who are blind navigate through their daily routine.
- Used state of the art real-time object detection and distance estimation to alert the user through vibrations and audio feedback.

COVID Bot

[4th Place - SOS Hackathon 2020]

- Designed, coded, and prototyped an automated mopping robot with UV disinfectant light and Arduino
- Used for sanitizing surfaces in hospitals during the COVID-19 outbreak to reduce hospital maintenance staff and the infection rate

Edu'Sustainability'

[MadHacks'19]

- Ideated, implemented, interphased, and prototyped a module-based game using Unity and C#
- Aimed to educate primary school kids about waste segregation & carbon footprint reduction

SKILLS & LANGUAGES

- Data Programming: Python (Pandas/GeoPandas, Matplotlib, Flask, SQLite3, BeautifulSoup, sklearn, MastML), Octave, R
- Operating Systems: C, macOS, Linux, Windows
- Integration Tools: Terraform, AWS(CloudWatch, Cost Estimator, API Gateway, Lambda), GCP(Virtual Machine, AI), SonarQube
- Web-App Development: Java, Kotlin, Flutter, Html, CSS, javascript, PHP
- Robotics & Game Development: C++, C#, Arduino, Unity

EXTRACURRICULAR ACTIVITIES

President, The Data Science Club

[Sep '20 - Present]

- Contribute to Industry & Faculty Outreach, Social Media Marketing, Collaboration Discussions
- Organize Data Science and Career Development Workshops and Virtual Networking Events for 525 club members

Co-Founder, Badger Cricket Club

[Nov '19 - Present]

- Manage organization affiliation, organize cricket matches, live match streams, and networking events
- Promote cricket on campus and develop a community of about 275 cricket enthusiasts

Member, Wisconsin Autonomous

[Sep '19 - March '20]

- Created data of specific traffic cones by clicking pictures and annotating them to train test the Yolo model
- Trained Yolo model to identify traffic cones through the stereo camera

Software Engineer, AI Club

[Sep '19 - May '20]

- Learned basic principles of deep learning in well-bonded study groups
- MelodiCode: Participated in a team project to auto-generate melodies using Artificial Neural Networks