Logan G. Gall

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Portfolio: logangall.com

EDUCATION

Masters of Geographic Information Sciences   Expected May 2025
University of Minnesota   Minneapolis, MN
- GPA: 4.0
- Activities: President, GIS Student Organization (GISSO) 2023–Present; President, Copter Club 2022–Present
- Relevant Coursework: Advanced Geocomputing, Spatial Database Design, Spatial Data Science II, Digital Signal Processing Design, Spatiotemporal Modeling & Simulation, WebGIS & Services

B.S. Data Science, Statistics Minor   Sept. 2019 – May 2023
University of Minnesota   Minneapolis, MN
- GPA: 3.78, Dean's List: 4 terms
- Activities: President, Copter Club 2022–Present; Member, Association for Computing Machinery 2019–2023
- Relevant Coursework**:** Analytics and Data Driven Decision Making, Machine Learning Fundamentals, Mathematics of Image and Data Analysis, Operations Research for Data Science, Theory of Statistics

WORK EXPERIENCE

Graduate Research Assistant   Jan. 2025 - Present
University of Minnesota, Department of Geography, Environment, and Society   Minneapolis, MN
- Began design and development of computational hardware chips for spatial processing operations
- Performed data engineering, solved inquiries, and presented research findings at industry conference events
- Supported the University of Minnesota's GeoCommons research, teaching, and engagement activities

Graduate Research Assistant   Aug. 2023 – Jan. 2025
University of Minnesota, GEMS Informatics   St. Paul, MN
- Created machine learning models for spatiotemporal evapotranspiration prediction
- Designed workflow methods for cloud-centric programming and data sharing
- Worked on grants, proposals, and papers for irrigation-based agricultural research
- Designed and implemented data cleaning, preparation, and analysis methodologies

Internet Safety Evaluator   Apr. 2020 – Aug. 2023
TELUS International AI   Las Vegas, NV
- Trained AI to analyze social media posts by evaluating the accuracy of videos and comments
- Assessed content source trustworthiness to enhance automatic safety flagging systems

R&D Data Science Intern   May 2022 – Aug. 2022
The TORO Company   Bloomington, MN
- Created a machine learning model-based program for sports field management
- Performed drone flights for analysis of field conditions during tournament play
- Executed a research study of sports field treatments and their effects on field quality
- Implemented data cleaning, modeling, and treatment recommendation programs for field management

CERTIFICATIONS, PUBLICATIONS, AND SKILLS

Certifications: FAA Part 107 (Professional Drone & UAS Operations)
Publications: Gall, L., Glancy, T., Kantar, M., & Runck, B. C. (2024). *A tool for integrating agrometeorological observation data for digital agriculture: A Minnesota case study*. Agricultural and Environmental Letters, 16 October 2024. https://doi.org/10.1002/ael2.20147.
Data Science: Cloud Computing, Data Cleaning, Data Engineering, Geospatial Modeling, Machine Learning, Statistics
Hardware: Drones, IoT Sensors, Microcontroller programming (Arduino, ESP-32, Raspberry Pi), Wireless Protocols
Programming: C++, CSS, HTML, JavaScript, Julia, Python, R, SQL, Verilog
Python Libraries: Flask, Folium, MatPlotLib, Numpy, Pandas, Psycopg, PyTorch, SciPy, Tensorflow Keras
Tools & Platforms: ArcGIS Pro, Docker, GitHub, Google Cloud Run, Jupyter Notebooks, Unity, Vivado