

GREYSON MEARES

Morgantown, WV | (304) 282-8498 | gcm00010@mix.wvu.edu | <https://greyson-m.github.io>

EDUCATION

West Virginia University — Morgantown, WV

May 2026

B.S. in Computer Science | Minor in Applied Mathematics

TECHNICAL SKILLS

Programming: C, C++, Java, Python, MATLAB, JavaScript

Systems/Tools: OpenGL, Git, Linux

Web/App: React, Node.js, Flask, MongoDB

Math/Computing: Numerical methods, Algorithms, Spectral methods

RESEARCH EXPERIENCE

Undergraduate Research, Department of Mathematics — West Virginia University May 2025 – Feb. 2026

- **Publication:** Greyson Meares, Sage Meiling, and Charis Tsikkou. "Dynamic Response of a Finite Circular Plate on an Elastic Half-Space Using the Truncated Lamb Kernel." *International Journal of Engineering Science*, <https://www.sciencedirect.com/science/article/pii/S0020722526000844>
- Developed and implemented numerical methods (spectral/Galerkin techniques, Hankel/Fourier transforms, careful quadrature) to solve and study a PDE model
- Validated against limiting cases and benchmarked numerical stability/conditioning
- Tools: Python (NumPy, SciPy, Matplotlib), reproducible workflows, version control

CAPSTONE

Mars Society University Rover Challenge — Team Mountaineers

Aug. 2025 – Present

- Collaborate in highly interdisciplinary engineering teams to integrate mechanical and electrical components to manufacture a multi-purpose rover
- Design and manufacture critical robotic arm infrastructure, including joints, functional links, and a custom wire guide, to ensure reliable movement and cable management
- Utilize CAD software and rapid prototyping (3D printing/manufacturing) to iteratively test, refine, and finalize physical assemblies for competition

RELEVANT COURSEWORK

Discrete Mathematics 2 (Game Theory); Dynamical Systems; Quantum Computing; Real Analysis; Partial Differential Equations; Complex Variables; Linear Algebra; Probability & Statistics; Artificial Intelligence; Microprocessor Systems; Algorithms; Compiler Construction; Data Structures; Operating Systems Structure

PROJECTS

- Dzhaniybekov Effect Simulation: Numerical rigid-body dynamics with a custom 3D renderer.
- Computational Fluid Dynamics: Developed code for solving 2D Euler flows.
- Nonlinear Conservation-Law *Solvers*: Implemented and compared schemes; stability/accuracy checks.

WORK EXPERIENCE

Lowe's — Electrical/Plumbing Associate — Morgantown, WV

Jul 2023 – Present

- Apply technical reasoning to customer problems in electrical and plumbing; ensured safety/compliance.
- Use enterprise systems to monitor inventory and place orders; maintained organized, searchable stock.
- Built product knowledge across categories; communicated clearly with DIY and professional customers.