DANIEL B. JOHNSON

MATERIALS ENGINEER

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CAREER SUMMARY

Materials Science major at the University of Michigan pursuing career in biomaterials and regenerative medicine. Experience in materials research, data processing & visualization, cell culturing, and robotics/electronics. Well-practiced problem solver and team player.

EDUCATION

Bachelors in Materials Science & Engineering | University of Michigan, Ann Arbor   2023-2026

WORK EXPERIENCE

Materials Science Intern | Bluuzone Bottles   2025-Present
- Researching mycelium as biodegradable material for disposable water bottles
- Writing grant applications to communicate research and gather additional resources

Co-Lead | Project SAPPHIRE, Michigan Carbon Capture   2024- Present
- Cultured microbial colonies in municipal water device for carbon capture and hydrogen gas production.
- Managed project team finances to ensure rapid but sustainable growth and development process.
- Considered factors along water treatment chain to find ideal integration with existing systems.

Lab Researcher | EMBiR Lab, University of Michigan   2023- Present
- Iterated geometries and published findings on soft biomimetic electrostatic actuators.
- Studied snake venom mechanisms and developing flesh phantoms to test novel biomedical injections.
- Designed molds and cast silicone for use in soft inflatable rolling robots.

Data Journalism Editor | The Michigan Daily Student Newspaper   2023- Present
- Managed summer production team of data journalists to create visualizations of student data.
- Wrote articles under tight deadlines, focusing on clear and concise communication.
- Gained experience with data management and visualization libraries including Pandas, D3, and R.

Audio Staff | Duderstadt Audio Studios   2024- Present
- Trained in safe and effective use of analog and digital tools for professional audio recording.
- Organized and troubleshot signal flow through outboard gear to assist with efficient client productions.

TECHNICAL SKILLS

Software: Python, MATLAB, R, C++, CAD (SOLIDWORKS), CFD (Ansys Fluent)
Hardware: Materials characterization, Mill/lathe machining, Silicone molding, Microbial culture