# Sruthi Malineni

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## Education

**University of Pittsburgh, David C. Frederick Honors College**
*BS in Computer Science/Data Science, Minor in Neuroscience* | GPA: 4.00 (CS: 4.00) | Dean's List

**Relevant Coursework:** Machine Learning, Mathematical Statistics, Introduction to Data Science, Data Structures and Algorithms, Computer Organization and Assembly Language, Systems Software, Linear Algebra

**Skills:** Java, Python, R, C, SQL, PyTorch, TensorFlow, Power Apps, Power BI, Power Automate, Microsoft Office, GitHub, Assembly, Swift, HTML, JavaScript, CSS, MATLAB, Tableau, Unix, Angular, MongoDB, Jira

## Professional Experience

**Software Engineering Intern,** *PNC Financial Services* May 2024 - Aug 2024 | Pittsburgh, PA

- Engineered a comprehensive web application utilizing Microsoft PowerApps and optimizing Power Automate flows to enhance and automate internal business processes.
- Leveraged PowerApps connectors and custom APIs to extend functionality and facilitate data flow between disparate systems.
- Conducted thorough testing to resolve defects and optimize performance, ensuring readiness for secure and reliable production deployment following the Agile workflow.

**Computer Science Researcher,** *Surreality Lab* July 2024 - Present | Oakland, PA

- Creating machine learning models using TensorFlow to automate the segmentation of medical imaging data, enabling high-precision predictions of bone mineral density across individual vertebrae.
- Specializing in the design and optimization of deep learning architectures, including generative models, to improve the precision of preoperative risk assessments in spine surgeries.
- Contributing to the creation of advanced neural networks to streamline clinical workflows, with potential future applications in augmented reality for real-time guidance and precision in surgical screw placement.

**Undergraduate Researcher,** *Dr. David Ryan Koes's Lab* Jan 2024 - Present | Oakland, PA

- Advancing machine learning methodologies for 3D molecular structure analysis by contributing to the development of deep generative models for structure-based drug design.
- Implementing and optimizing neural network architectures using Python and PyTorch for high-dimensional data generation and analysis.

## Leadership

**Vice President,** *Women in CS Club* April 2024 – Present | Oakland, PA

- Managing club finances, including budgeting, expense tracking, and securing sponsorships; organized events to support initiatives for 50+ members.
- Collaborated with the executive team to plan and execute events, workshops, and networking opportunities, enhancing member engagement and industry connections.

**Consultant,** *Pittsburgh Management Consulting* Jan 2024 – Present | Oakland, PA

- Working with a Fortune 500 pharmaceutical company on a confidential project under NDA, focusing on identifying and researching AI use cases in the supply chain.
- Engaging in advanced data analysis, strategic problem-solving, and collaborative research efforts to develop actionable insights and recommendations.

## Projects

**MUST: Machine Utilized Screening Tool**, *Pitt Challenge* 2023

- Built a genomic data analysis tool in Python and StreamLit to assess antidepressant efficacy based on patient genomic profiles and 500+ known mutations.
- Led project development, from algorithm design for genomic analysis to data integration and front-end implementation.

**StudySpace***, SheInnovates Hackathon* 2024

- Engineered an iOS app using Swift, SwiftUI, and XCode for reserving study spaces at the University of Pittsburgh, with seamless frontend and backend integration for enhanced user experience

**Organizations:** Frederick Honors College Ambassador, Women in Computer Science, South Asian Student Association, Minority Association of Computing