

Minati Alphonso

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EDUCATION

South Dakota Mines

M.S. Computer Science and Engineering (CGPA: 3.37)

Rapid City, SD

Graduation: May 2025

B.S. Computer Science (CGPA: 3.47)

Aug 2018 – May 2022

Awards: Grace Hopper Celebration Scholar 2020, Fomento Scholar 2018 – 2022

PROJECTS

Sentiment Analysis | Python, Matplotlib, NumPy, Jupyter

Apr 2024 – May 2024

- Implemented a Random Forest classifier from scratch and employed TF-IDF for text vectorization.
- Conducted extensive text preprocessing, feature engineering, and exploratory data analysis.

ElderEase: Elder Care Platform | C#, ASP.NET Razor Pages, Figma

Feb 2, 2024 – Feb 4, 2024

- Developed a working prototype to connect volunteers with elderly individuals for support and companionship.

Multiplayer Android Game | Java, Android Studio, Firebase

Feb 2022 – Apr 2022

- Built Risk multiplayer board game by implementing the Model-View-Controller (MVC) pattern.
- Implemented user experience (UX) and server-side data management with device synchronization.

VR Geology Field Trip Application | C#, Unity

Aug 2021 – May 2022

- Developed a Meta Quest 2 application to allow users to interact with 3D maps.
- Included a file explorer UI to load maps stored on the VR headset in real-time.

Image Compressor | C++

Nov 2019 – Dec 2019

- Developed a content-aware image resizer using the Seam Carving algorithm.
- Computed an energy map and utilized Dynamic Programming for optimal seam removal.

WORK EXPERIENCE

Graduate Research Assistant | C#, Unity

Aug 2024 – Present

South Dakota Mines

Rapid City, SD

- Testing and refining virtual reality tutorials for use in the upcoming 'Intro to VR' class.

Graduate Teaching Assistant | C++, Python, Java

Aug 2023 – May 2024

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Rapid City, SD

- Managed grading for over 150 students across 3 computer science courses, ensuring timely and accurate feedback.

Application/Business Analyst | Vue.js, TeamDynamix

Jun 2022 – Jun 2023

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Rapid City, SD

- Collaborated across 2 campuses and 3 departments to develop system-wide applications.
- Designed workflow automation processes that improved productivity and efficiency.
- Developed and maintained 10+ web forms and enhanced user experience.

Software Engineering Intern | C#, WPF, Jira, Perforce, Confluence

May 2021 – Aug 2021

Electronic Arts

Orlando, FL

- Developed testing tool features, allowing designers to maintain in-game tunable assets effectively.
- Collaborated with cross-functional teams to finalize the design and features.
- Authored comprehensive technical documentation and conducted thorough feature testing.

Undergraduate Research Assistant | C#, Unity

Aug 2020 – Dec 2020

South Dakota Mines

Rapid City, SD

- Conducted 11 participant sessions to collect data on different interaction techniques in VR.
- Analyzed the data to gather insights for a long-term VR interaction framework.

TECHNICAL SKILLS

Languages: Java, Python, C++, C#, JavaScript

Frameworks: Vue.js, Node.js

Developer Tools: Git, GitHub, GitLab, Jupyter, Android Studio, Unity, VS Code, Visual Studio, PyCharm, IntelliJ