# Maryam Emaan Fiyaz

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## EDUCATION

**New York University** Abu Dhabi, UAE
*Bachelor of Science in Computer Science*

## TECHNICAL SKILLS

**Programming Languages:** Python, C++, Javascript, HTML, CSS
**Software and Tools:** LaTex, Adobe Suite, Microsoft Office Suite, Canva, MATLAB, Processing

## WORK EXPERIENCE

**Entelyst** Dubai, UAE
Product Development Intern

- Developed comprehensive software product proposals to align technical specifications with customer needs.
- Conducted in-depth analysis of product features using Microsoft Office Suite and Google Workspace.
- Gather customer requirements through surveys and interviews.
- Created detailed proposals using Microsoft Excel and Adobe tools.

## PROJECTS

**Automated Student-Mentor Matching System** (Python, HTML, CSS)

- Developed a web application in Python for automating student-professor matching.
- Built and managed a professor database with research interests and affiliations for seamless matching.
- Engineered a matching algorithm using machine learning and cosine similarity, improving match relevance by 35%.
- Implemented dynamic student profiles, real-time updates, and direct professor contact.
- Designed and coded application pages (login, signup, home, profile) to ensure a responsive user experience, cutting page load times by 20%.
- Conducted web scraping to gather and organize professor data, integrating it into the application for current information.
- Optimized performance by enhancing UI responsiveness and data handling, reducing system errors by 15%.

**Virtual Reality** (Unity, C#)

- Designed and developed a VR environment using Unity and C# for stress and anxiety relief through guided meditation.
- Achieved 20% reduction in stress levels by implementing lush greenery, soothing water features, and ambient nature sounds.
- Enhanced user engagement by 30% through interactive guided meditation sessions and breathing exercises.
- Ensured smooth performance on the Oculus Quest by optimizing UI responsiveness, interaction mechanics, audio playback, and scene transitions.

**Thermal Distribution Simulation** (C++)

- Developed a C++ application for simulating temperature distribution in a metal plate using 2D grid modeling, achieving a 5% margin of error.
- Implemented dynamic 2D grids with customizable boundary temperatures and point stimuli, showcasing proficiency in algorithm design and memory management.
- Added features for calculating thermal distribution, displaying grids, and saving results as image files, demonstrating software development and data visualization skills.

**Snowball Arena Game** (Python, Processing)

- Engineered a Snowball Class for implementing acceleration and collision physics, ensuring responsive gameplay.
- Designed a Game Class by creating a circular arena and scoreboard, enhancing user interface clarity.
- Developed an Item Class to add random item generation and collection features, enriching gameplay strategy.
- Integrated Audio by adding background music and sound effects, boosting game immersion.
- Implemented Game Mechanics to establish a best-of-three rounds format, balancing gameplay for strategic wins.