MUNEEB AHMAD

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EDUCATION

Jamia Millia Islamia, New Delhi, India   **2021 - 2025**
- **Bachelor of Technology in Computer Engineering**
  First Division with Honours, CGPA: **9.05 out of 10**
  Coursework: Computer Architecture, Parallel & Distributed Computing, Compiler Design

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WORK EXPERIENCE

Undergraduate Researcher at BeyondDefence Lab, University of New Mexico   **Dec '24-Present**
- Evaluating ML model compression techniques for edge devices with specialized accelerators.

Advanced Application Engineering Intern at Accenture, Gurugram, India   **May '24- July '24**
- Completed intensive one month training program spanning multiple domains such as cloud computing and artificial intelligence.
- Worked on Cyber Strategy and Security: Third Party Risk Assessment.

Intern at Nikah Forever, New Delhi, India   **Jun '23-Aug '23**
- Developed content-based filtering algorithm for a best match recommendation system achieving better results than the existing rule-based system.
- Reduced memory footprint by 50% for deployment on a high traffic platform.
- Languages and Tools: Python, Pandas, NumPy, scikit-learn, Implicit-ALS, Flask.

PROJECTS

Vulkan Forward Clustered Renderer 🔗   **April '23-July '24**
- Forward Clustered Renderer for GLTF Scenes.
- Built to have an easy-to-customize render pipeline.
- Voxel meshing using compute shaders, resulting in 6 times lower draw count
- Built using dynamic rendering for immediate mode GPUs
- Primary Tools: Vulkan, C++17

Lua Binding Annotation Generator   **June '24**
- Generates Lua annotations and bindings for C++ classes automatically by analyzing the abstract syntax tree using libclang and Python.

Engine-2: Real-time 3-D rendering engine 🔗   **Oct '21-Jan '23**
- Rendering engine for drawing large amounts of dense geometry utilizing visibility buffers.
- **Sparse Entity Component System:** A data-oriented object storage system (ECS) using sparse arrays. 🔗
- **OpenGL abstraction library:** Eases working with OpenGL while retaining low-level control.
- Primary Tools: OpenGL, C++17

SKILLS & ACHIEVEMENTS
- **Languages** - C, C++, Python, Java, GLSL, Rust, JavaScript, SQL, Lua
- **Frameworks** – CUDA, Vulkan, OpenGL, PyTorch, OpenMP, MPI
- **Tools** – RenderDoc, NVIDIA Nsight, Visual Studio, CMake, Dr. Memory
- **Graduate Aptitude Test in Engineering (GATE) for Computer Science and Information Technology 2024 – Qualified** with **98.76** percentile. All India Rank: 1532
- **Joint Entrance Examination Main (JEE Mains) 2021** with **97.71** percentile.