Arsh Sharma

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EDUCATION

National Institute of Technology — Hamirpur, India
Bachelor of Engineering in Electronics and Communication; Current GPA: 3.4 (8.52/10.0) — *Aug. 2018 – May. 2023**

Mount Carmel School — Palampur, India
Indian School Certificate Examination(ISC-CISCE); Percentage: 91% — *Aug. 2018*

EXPERIENCE

Julia Computing — Cambridge, MA
3D Visualization Intern — *Sept 2021 - Present*

- **JuliaSim**: Working towards adding visualization support on a cloud-based simulation platform.

Google Summer of Code — Remote
Student Developer — *June 2021 - Sept 2021*

- **Javis.jl**: Added features like layers, livestreaming, morphing etc. to Javis, a Cairo based 2D animation library for mathematical and scientific visualizations.

Julia Season of Contributions — Remote
Student Developer — *May 2020 - Sept 2020*

- **JuliaGeo**: A GeoSpatial data handling ecosystem for the Julia language. Simplified the GIS pipelines to read and view data in Julia, right from parsing it to a Tabular format and be able to plot it, all withing 4 lines of Julia code.

PROJECTS

- **IBMQJulia.jl**: A package written in Julia that uploads quantum circuits generated by Yao.jl to IBM-Quantum, that runs quantum circuits on real quantum computers. Implemented the OpenQasm specifications paper composing two major units, the REST API and the Yao IR to QObj parser.
- **Hardware based cache miss detector**: Design of Cache Memory with cache controller using VHDL for detection and mitigation of cache misses.
- **Random.org client**: A client library that fetches true random numbers from Random.org, developed for Julia and Matlab

PROGRAMMING SKILLS

- **Languages**: Julia, Javascript, C++, Matlab, Python, Java

- **Skills**: FastAPI, SQL, REST-API, Git, Matplotlib, Three.js, Processing

- **Courses/Certifications**: Introductory Genomics, IBM Quantum Challenge

MISCELLANEOUS

- **Positions of Responsibility**

  - **Founder & President - Julia Student Developer Club**: A club aimed at educating students about best programming practices and open-source engagement through The Julia Language.
  - **Secretary - Team ISTE**: Organized multiple online as well as offline events to promote technical education and skill building for more than 1k students across India.
  - **Joint Secretary - Hult Prize**: Organized the Hult Prize OnCampus program in my institute to promote social entrepreneurship and events aimed at the SDGs laid out by the United Nations.

- **Hobbies and Interests**: Music, Outdoor sports, Gaming, Travelling