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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

 \circ JuliaSim: Working towards adding visualization support for simulations on a cloud-based simulation platform.

Google Summer of Code

Remote

Student Developer

June 2021 - Oct 2016

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

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