Harsh Pal

Education

Indian Institute of Technology, Roorkee

Nov 2020 - July 2024

B. Tech. in Mechanical Engineering

o CGPA: 8.19

Experience

Associate Software Engineer

Bengalore, Karnataka July 2024 – Present

Wise Tech Global Pvt. Ltd.

 $\circ\,$ Worked in WinForms to create pages for the RDP version.

- o Reduced defects of the Blazor Version of Cargowise
- Improved the user-experience of the Main-Form

Research Intern

Victoria, BC, Canada May 2023 – Aug 2023

 $University\ of\ Victoria$

- Worked on a research, specializing in micromechanical modeling of thermal conductivity in wood composites.
- Developed thermal conductivity equations for diverse cross-laminated timber panels, for different scenarios.
- Contributed to research with wide-reaching implications for energy-efficient construction practices in North America, South America, and Europe.

Projects

AR Based Game

- o Developed a 3D FPS Mobile Game in Unity, incorporating AR technology for enhanced player immersion.
- Utilized AR Foundation to seamlessly integrate virtual enemies into real-world environments through the device camera, delivering an immersive combat experience.
- o Tools Used: C#, Unity Game Engine

Minimization of Earing defects in deep-drawn cups using Machine Learning

- Employed machine learning and FEM simulations to reduce earing defects in deep drawing due to metal anisotropy.
- o Tools Used: Python, Dynaform, Solidworks

Byteshell in C

- Created a lightning-fast C-based command line shell with an execution time of just 0.05 seconds.
- Features a Compact Command History, storing up to 100 entries with a minimal 2 MB footprint.
- o Tools Used: C

Technologies

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

Technologies: .NET, WinForms, Unity

Achievements

- Won Professional Development and Innovation Award for Bachelors' Project in Convocation 2024.
- Awarded the **Mitacs GRI** fellowship which is a 12-week fully-funded research internship under the supervision of faculty members from a prestigious universities in Canada
- o Global Rank 784 in Codeforces Round 895