
Project Description for R&D Internship

Job Title: Intern: Full-Stack AI Software Engineer Intern – 3D Glare Analysis of Urban Solar PV

We are looking for motivated students with strong software engineering and AI interests to join an exciting R&D project on developing a next-generation 3D glare assessment platform for photovoltaic (PV) deployment in dense urban environments.

About the Project

As Singapore continues to accelerate urban solar deployment, smart planning tools are increasingly important to optimize PV integration while minimizing visual impact and glare risks to nearby buildings, pedestrians, drivers, and aviation-related viewpoints.

This project focuses on developing a web-based 3D glare analysis platform that integrates:

- Interactive 3D visualization
- Cloud computing workflows
- Simulation and data processing
- AI-assisted analysis tools for urban solar planning

What You May Work On

- Full-stack web application development
- 3D web visualization and UI/UX
- Cloud computing and deployment (AWS)
- AI/computer vision related workflows

Preferred Skills

- Software Engineering / Computer Science background
- Experience in Python, JavaScript, or web development
- Strong problem-solving and self-learning ability

Eligibility

Students currently enrolled in (or recently graduated from):

- Diploma
- Bachelor's
- Master's programs

Preferred internship duration:

6 months or longer

What You Will Gain

- Hands-on experience building a real-world AI-enabled urban solar platform
- Exposure to geospatial AI, cloud computing, and 3D simulation workflows
- Opportunity to contribute to Singapore's nationwide solar energy research and planning initiatives

Interested applicants to kindly submit CV or Portfolio to Soe Pyae (soepyae@nus.edu.sg) and Dr Sun Huixuan (sersunh@nus.edu.sg) for review.