Internship at IIT Kanpur

Android App Development for VR based Gaming

Duration: 4 Months

Introduction: The Department of Computer Science and Engineering at the Indian Institute of Technology Kanpur (IIT Kanpur) was the first department in India to start Computer Science education. The department runs BTech, MTech and PhD programs and is engaged in cutting edge research with sponsored projects and consultancies.

We at Dept. of CSE, IIT Kanpur are jointly working on a project on the development of indoor positioning system with GT Silicon Private Limited, an IIT Kanpur start-up which designs, manufactures and sells innovative “wearable pedestrian navigation sensors” (a.k.a Pedestrian Dead Reckoning or PDR sensors) under the brand name ‘oblu’ (www.oblu.io) and ‘Inertial Elements’ (www.inertialelements.com). Their products have reached to 100+ research groups across 24 countries. Their technology has won the prestigious DST-Lockheed Martin India Innovation Award (IIGP), 2015 and also featured in Top 10 Promising Start-Ups at the CII Industrial Innovation Awards 2015.

About the Internship:

oblu is a miniaturized, low cost and open source inertial sensor targete towards wearable motion sensing applications. It provides you a platform to construct and implement your ideas on motion sensing. oblu is pre-programmed as shoe-mounted sensor (also known as Pedestrian Dead Reckoning or PDR sensor) used for indoor tracking of humans. It has various applications apart from navigation which includes robotics, biomedic applications and virtual reality.

Most of the Virtual Reality/Augmented Reality (VR/AR) games available in the market like Pokémon Go are for outdoor. This is because indoor tracking is impossible with GPS. But with oblu one can easily track human step movements indoor, making it possible for development of VR/AR based games for indoor also.

So here is the project - “Android app development for Virtual Reality based gaming with oblu.”

The project includes the following activities:

- Create virtual 3D environment as a function of distance or coordinates in space, compatible with VR glass.
- Integrate virtual environment with oblu.
- Create interactive cloud based game around it.

# of internships available: 1

Skill(s) required: Android, Cloud and C Programming

Who can apply?

Only those candidates can apply who:

1. are available for full time (in-office) internship
2. can preferably start the internship between 14th Dec’17 and 30th Dec’17
3. are available for duration of 4 months
4. have relevant skills and interests
5. are currently in final year of engineering study

Stipend: Rs 5000/- per month

Perks: Certificate, Letter of recommendation for outstanding work.

Accommodation: We cannot guarantee your accommodation inside the campus. But we will assist you in finding accommodation around campus.

Please send your CV to karkare@cse.iitk.ac.in along with your brief understanding about the device oblu.