in.linkedin.com/in/nakulgulati
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Nakul Gulati

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Experience

Research Assistant (intern) **LiveLabs@SIS, SMU, Singapore** **June - August 2015**

- Proposed and prototyped a system to detect occupancy and hogging of an area in real-time
- The IR sensor prototype achieved 80% occupancy detection accuracy
- Work was published in the International Workshop on Internet of Things towards Applications, ACM Sensys 2015

Student Developer **Google Summer of Code 2015** **May - August 2015**

Organization: Pidgin, Finch and libpurple

- Reversed engineered and implemented Google+ Hangouts protocol for libpurple 3.0
- Protocol to be merged in libpurple3 (currently in development)

Software Development Intern **Pyoopil Educational Technologies** **June - July 2014**

- Implemented 2 out of 5 backend modules for the Pyoopil Dynamic Learning Environment; backend implemented in CakePHP and MySQL

Organizer **ingeNUity'14, NIIT University** **Dec 2013 - March 2014**

- Served as one of the members of the organization team for NIIT University's techno-cultural fest
- Responsibilities included organization of the fest, sponsorship and marketing
- Lead the technical team which was responsible for the fest website and digital creatives

Publications

"Real-time Detection of Seat Occupancy & Hogging" by Nguyen Huy Hoang Huy, Nakul Gulati, Lee Youngki and Rajesh Krishna Balan, **International Workshop on Internet of Things towards Applications, ACM Sensys 2015**

Projects and Skills

Skills: C, C++, Java, PHP, SQL, Android, JavaScript, HTML/CSS, GNU/Linux

- **Sentiment Analysis**: Predicting polarity (positive/negative) of textual data using maximum likelihood approach
- **Graph Engine**: Engine to store graph like data in relational schema; provides API to generate first-level entity association graphs
- **Location Based Customization (Android app)**: Customizes phone settings (Wi-Fi, Bluetooth, Data) based on user's location; setting groups created by user
- **Connect Four AI Bot**: Implemented Minimax algorithm in Java to play the game of Connect Four; the algorithm determines optimum move by 'looking' four moves ahead
- **War Robot**: Arduino based, remote controlled (using Android app) robot with a spinning blade as primary weapon

Education

NIIT University **B.Tech Computer Science and Engineering** **Expected Graduation:** July 2016

Relevant coursework: Data Structures, Algorithms, Data Mining, Artificial Neural Networks, Web Intelligence and Algorithms, Natural Language Processing, Computational Geometry and its Applications, Computer Vision, Operating Systems, Computer Architecture, Databases, Computer Networks, Discrete Mathematics, Software Engineering

References

Dr. Rajesh Krishna Balan, Director, LiveLabs-Urban Lifestyle Innovation Platform
Dr. Nirmal Kumar Sancheti, Professor (former), NIIT University