

# Harpreet Singh

SOFTWARE DEVELOPER

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## Education

### Trinity College Dublin

*Dublin, Ireland*

#### M.SC. COMPUTER SCIENCE, NETWORKS AND DISTRIBUTED SYSTEMS

*Sep. 2015 - Sep. 2016  
(Expected)*

- Taught Modules Result: I.1
- Modules taken
  - CS7002 - Data Communication & Networking
  - CS7003 - Middleware for Distributed Systems
  - CS7009 - Networked Applications I
  - CS7010 - Software Engineering for Distributed Systems
  - CS7011 - Business Innovation
  - CS7012 - Management of Networks and Distributed Systems
  - CS7048 - Data Communications and Wireless Networking Practical
  - CS7049 - Software Engineering / Middleware Group Project
  - CS7050 - Individual Programming Project
  - CS7051 - Networked Applications II
  - CS7052 - Sustainable ICT
  - CS7053 - Security of Networks and Distributed Systems
- Modules Currently Ongoing
  - CS7042 - Research Dissertation
- Projects
  - Designed a Peer-to-Peer Multithreaded Chat Server using Ruby as part of the Individual Programming Project
  - Using Agile Software development process, developed a web server using the MEAN stack and an Android application as part of the Group Programming Project
  - Developed a Web Server Application using the Facebook Graph API and the MEAN stack as part of Networked Applications II

### University of Delhi

*New Delhi, India*

#### B.SC. PHYSICAL SCIENCES

*July 2012 - June 2015*

- Result: I.1
- Project: "Obstruction Avoiding Arduino Robot". Designed an autonomous robot using the Arduino Micro-controller which avoided obstructions in its path. Developed analytical and design skills and experienced working in a team.

## Experience

### Post Graduate Research, Trinity College Dublin (Prof. Stefan Weber)

*Dublin, Ireland*

#### RESEARCHER FOR APPLICATION PATTERNS IN DATA CENTER NETWORKS

*Jan. 2016 - Aug. 2016*

- Currently researching on Application Patterns employed in Software Defined Networks of Data centers
- Implementing a Software Defined Network that translates Application Patterns/Intent into the Network Topology
- Using Mininet Network Emulator, Python, OpenDayLight Controller and Git, the development of the prototype is done on Linux

## Extracurricular Activities

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### Dublin University Rifle Club

ACTIVE MEMBER

*Dublin, Ireland*  
*Sept. 2015 - PRESENT*

- Member of the squad for 0.22 small bore rifle

### 'Ankur' Theatre Society, University of Delhi

ASSISTANT DIRECTOR OF A STREET PLAY

*New Delhi, India*  
*July 2012 - March 2014*

- Was responsible for managing and creatively driving a cast and crew of 20 people of a street play production of which was critically appreciated in the Delhi University Circuit and won numerous competitions
- Involved in numerous Stage and Street Play Productions which won a lot of competitions at the Delhi University Theatre Circuit

## Awards

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### INTERNATIONAL

- |      |                                                                                                                                                                                                                                         |                       |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 2010 | <b>3rd Position</b> , "Quanta, the annual International Competition in Science"-Designed a model motor boat that was made to race among-st other competitors in a swimming pool, with schools from 16 different countries participating | <i>Lucknow, India</i> |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|

### DOMESTIC

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|------|---------------------------------------------------------------------------------------------|------------------------|
| 2011 | <b>Michelle's Cup</b> , Awarded for being the best all-rounder student of St. Jude's School | <i>Dehradun, India</i> |
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## Skills

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<b>Programming</b>	Python, Ruby, JAVA, Node.JS, LaTeX
<b>Web</b>	Express with Node.JS, AngularJS, MongoDB, HTML5
<b>Tools</b>	Git, Vim, Linux, Mininet
<b>Languages</b>	English, Hindi, Punjabi

## References

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### Dr. Stefan Weber

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