

Harpreet Singh

Thornville Avenue, Dublin 5

☎ (+353) 83 848 8767 | ✉ singhh@tcd.ie | 🏠 www.harpreet.me | 📱 etSingh | 🌐 etSingh

Summary

Recently graduated from Trinity College Dublin with an M.Sc. in Computer Science with Distinction. Demonstrated capability of working in a team, in order to deliver high quality software. I want to employ my skill set in a Software Engineering role to further my knowledge and expertise.

Education

Trinity College Dublin

M.Sc. Computer Science, Networks and Distributed Systems

Dublin, Ireland

Sep. 2015 - Sep. 2016

- Graduated with Distinction
- Grade: 73%

University of Delhi

B.Sc. Physical Sciences

New Delhi, India

July 2012 - June 2015

- Graduated with First Class Honours
- Grade: 75%

Research

Postgraduate Research Dissertation, Trinity College Dublin

Dublin, Ireland

Proactive Configuration of Data Centre Networks

Apr. 2016 - Sep. 2016

- The Research was aimed at optimizing data centre networks for Big Data processing applications, specifically Hadoop, in Proactive manner using Software-Defined Networking.
- Proactive flow scheduling was evaluated on the basis of the network throughput achieved and job completion times of **Hadoop** jobs running in a **16 host cluster** emulation.
- Development was done using **Python**, while **Git** was used for source control.

Experience

Teaching Assistant

Dublin, Ireland

School of Computer Science and Statistics, Trinity College Dublin

Oct. 2016 - Present

- Currently working as a Teaching Assistant for two Masters programmes in Computer Science.
- Duties such as assisting students with their programming assignments, taking tutorials for certain lectures, assisting marking of assignments and tests under the supervision of the lecturer concerned.
- Coordinating a team of demonstrators for an undergraduate module in Distributed Computing.

Software Engineering Group Project, Trinity College Dublin

Dublin, Ireland

www.zoop.xyz

Dec. 2015 - Mar. 2016

- Zoop was a finalist at the **Citibank upStart Programme 2016**. It is a platform that let's food vendors push real time advertisements to an Android application from a Web portal.
- Developed a Web Application and an Android Application using **Test-Driven Development** and **Agile Methodologies** in a group of four developers.
- Web application was developed using **AngularJS**, **MongoDB** and **Node.JS**, while the mobile application was developed for **Android** using **Java**.

Networked Applications Project, Trinity College Dublin

Dublin, Ireland

www.organisr.xyz

Jan. 2016 - Mar. 2016

- Organisr is a platform that enables instructors of amateur sports clubs to organize training sessions.
- Developed a *Web Application* using **Facebook Graph API**, **MongoDB**, **Node.JS** and **AngularJS** in a group of 5 developers, which was deployed on **Heroku**.

Individual Programming Project, Trinity College Dublin

Dublin, Ireland

<https://github.com/etSingh/P2PChatServer>

Oct. 2015 - Dec. 2015

- Using **UDP Sockets**, developed a Peer-to-Peer Chat Server based on the *Pastry routing protocol*.
- Acquired extensive experience of developing applications with **Ruby** and using **Git** for version control.

Undergraduate Final Project, University of Delhi

New Delhi, India

Obstruction Avoiding Arduino Robot

Jan. 2015 - Apr. 2015

- Designed an autonomous robot using the **Arduino Microcontroller** which avoided obstructions in its path by using an Ultra-Sonic sensor.
- Gained experience of Embedded programming using **C**.

Skills

Programming	Python, Ruby, Java, Node.JS, C/C++, C#, LaTeX
Web	Express with Node.JS, AngularJS, MongoDB, HTML5, CSS
Tools	Git, Vim, Linux, Docker
Languages	English, Hindi, Punjabi

Extracurricular Activities

'Ankur' Theatre Society, University of Delhi

New Delhi, India

Assistant Director of a Street Play

July 2012 - March 2014

- 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 Theatre Circuit and won numerous competitions.

Awards

INTERNATIONAL

- | | | |
|------|---|----------------|
| 2010 | 3rd Position , "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. | Lucknow, India |
|------|---|----------------|

DOMESTIC

- | | | |
|------|--|-----------------|
| 2011 | Michelle's Cup , Awarded for being the best all-rounder student of St. Jude's School. | Dehradun, India |
|------|--|-----------------|

References

Prof. Stefan Weber

032 Lloyd Institute
Trinity College Dublin
Stefan.Weber@scss.tcd.ie