# Subhasree Sengupta

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**OBJECTIVE**: To pursue summer internship

**FOCUS AREAS** : User generated content, Social Computing/HCI, Data Analytics/Data Mining, Machine Learning

**EDUCATION**:

**PhD student at University of Southern California, Los Angeles from Fall 2016, in department of Computer Science.**

**Bachelor of Science with** Major **in Computer Sc in Honors Curriculum (Summa cum laude and High Distinction)** with Minor in **Mathematics and Statistics from** College of Science and Engineering, University of Minnesota-Twin Cities Minneapolis, MN
**Overall GPA: 3.93/4.00 Major GPA 3.97/4.00**

**SKILLS:**

- **Computer Languages:** Java, C, C++, Python ,VB.Net, VBScript, R, HTML, JavaScript, SQL.
- **Application Software**: Matlab, Exploratory Data Analysis tools like Qlikview, Microsoft Sequel server Mgmt, MS Office
- **Operating Systems** : LINUX, Windows and DOS
- **Teaching:** Undergraduate Teaching Assistant in C,C++ and Java since Sep 2014, CRLA ( Level-3)

**WORK EXPERIENCE**

1. **RESEARCH PROJECT EXPERIENCE**

- Honors Thesis titled "**Understanding the people behind the network: A behavioral study based on a demographic perspective from Twitter datasets**".

- I worked on information retrieval and social media data mining at the Grouplens lab under **Prof. Brent Hecht**, Dept of Computer Sc, University of Minnesota. As part of this research I have primarily been working on exploratory data analysis using VGI (Voluntary Geographic Information) data.

- Worked on the Microsoft sponsored project "Time Engine", software on Time management for students under **Prof Amy Larson**, Dept of Computer Sc, University of Minnesota. Here , we worked on creating a proof o**f** concept to create user-friendly visualization for Data Analysis, using the nvd3 package in the ionic platform using angular JS.

- Worked on Data downscaling in Climatology Project under **Dr Snigdhanshu Chatterjee**, Professor, Department of Statistics, at University of Minnesota.

- I was a team member in the "Backseat Driver" Project under **Dr Paul Imbertson**, Professor in ECE Dept, at University of Minnesota for our client Honeywell Pvt Limited. The name of the project was VEIL (Vehicular Integrated Life-Saving System).The main concept design; Development of the working scheme, as well adding new innovative ideas to the basic outline of the project was done by me. The basic objective was to use GPS data to reduce bad accidents through alerting drivers about nearby road conditions and hazards (especially tricky turns, snow clogs etc) etc in real time and to provide history of traffic accidents in a particular area to caution the driver and inform the driver on weather conditions to foster safe driving.

2. **COURSE PROJECT EXPERIENCE**

- Building a Translator from a functional language to C++ in four iterations (**under Dr Dan Challou**)
- Simulating the File system of the Unix Operating System using C ( Under **Dr Tien He**)
- Built a logistical regression model using R to analyze the relationship between various quantitative and categorical variables from an online dataset based on census data ( Under **Prof. Megan Heyman**)
- Detecting and tracing edges of an image using Hough-transformation implemented in MATLAB ( **under Dr Nikos Papanikopolus**)
- Developed linear algebra operation modules in JAVA ( Under **Prof Chengyang Wu**)

- Worked on an open-source database called **postgresql**, to incorporate a new buffer replacement technique using FIFO developing a new keyword for PSQL command in C++ ( Under **Dr Mohammed Mokbel**)
- Developed a strategy based algorithm for a game called GOMOKU similar to TIC-TAC-TOE (This project was written in Scheme) ( under **Prof. Chris Dovolis**)
- Programming of Scribbler robots/Humanoids (NAO) using Calico( **Under Dr Maria Gini**)

## 3. INDUSTRY EXPERIENCE:

- **Information Services intern for Summer 2015 at The Toro Company, Bloomington, MN**
  Associated with their Business Intelligence team and worked on various projects to develop tools for Data Interpretation, data visualization, statistical analysis, and query optimization etc. using Qlikview, SQL Server Management Studio, Vbscript & Google maps API

- **Summer Engineering Intern for Summer 2014 at Tata Steel, India**
  Researched and worked on Data Sanitization and Formatting with the Customer Relationship Management (CRM) Database**,** using Macros coded in Visual Basic and worked on the maintenance of the CRM database

## TEACHING EXPERIENCE :

- Undergraduate TA for C/C++ Programming and Java Programming since Fall 2014
- TA for Fundamentals of Computer Science class as part of the summer program organized by Center for Talented Youth – Johns Hopkins.
- Peer learning Consultant (PLC) for SMART Learning commons to tutor students on Physics, Mathematics and Computer Science
- Undergraduate Teaching Assistant for MATH – CEP program which introduces nuances of higher level mathematics to students of Class 5-8 under GEM (Girls excelling in Mathematics) Project in Dept of Mathematics, University of Minnesota)
- Mentoring in Coderdodjo events working on Scratch & Appinventor to help K-12 students to develop simple innovative games/applets

## SCHOLARSHIPS :

- Winner of **Anneberg fellowship for research in communications at** University of Southern California
- Winner of Lando Scholarship awarded to outstanding undergraduates for $ 1000, awarded by Dept of Computer Science under College of Sc & Engg,Univ of Minnesota in 2014-15
- Winner of MnDRIVE Undergraduate Assistantship (one of the first winners) from Spring 2014 awarded by College of Sc & Engg,University of Minnesota.
- Winner of Gold Global Scholarship from University of Minnesota (Non Resident fee waiver) approx. 6000$ for 4 years awarded to International Students with outstanding achievements and scholastic records
- Winner of Govt. of India Scholarship Rs 80000/- per year(2000$/per annum ie 8000$ for 4 years) for ranking within Top 1% in India in 2012

## HONORS WON :

- Dean's List member in all semesters from freshman year.
- Honors Students at UMN
- Ranked 15th in Class XII High School Examination amongst 400,000 Candidates in India with 96% marks in 2012
- Ranked 1st in school in Class X Board examination amongst 250 students with 97% marks in aggregate in 2010.

## MEMBERSHIPS :

Tau Beta Pi, National Honor Engineering Society, ACM-W, ASME, North Star STEM Alliance
Society for Women Engineers

## LEADERSHIP -

Honors mentor, CSE Peer mentor, International Buddy Program mentor, Ecology drive participant

## EXTRACURRICULAR ACTIVITIES:

Creative writing, Essay writing, Swimming, Singing, Karate, Piano and Violin playing