

## TUSHAR GUPTA

1179 W 29<sup>th</sup> Street, Apt 6, Los Angeles, CA, 90007 • tushargu@usc.edu • <http://guptatushar.in> • (213) 294-9598

---

### EDUCATION

---

**Master of Science, Computer Science** August 2014 - May 2016  
University of Southern California, Los Angeles GPA: 3.74 / 4  
**Relevant Courses:** Algorithms, Operating Systems, Compilers, 3-D Graphics, Parallel Programming, Artificial Intelligence.

**Bachelor of Technology, Computer Science and Engineering** August 2007 - May 2011  
Lovely Professional University, Punjab, India GPA: 9.23 / 10

### TECHNICAL SKILLS

---

**Languages:** C#, Java, Python, C, C++, MS SQL Server, MySQL, PHP, Perl  
**Web:** Spring MVC, Microsoft MVC, JavaScript, JQuery, Ajax, RazorView  
**Libraries:** Android, ORM, Bootstrap, RazorView, OpenMP, MPI, CUDA, Telerik, WIX  
**Tools:** Eclipse, Visual Studio, Android Studio, AWS, SQL Server Management Studio, Eclipse, Maven, Gradle, Visio, Jenkins, Git, SVN, TFS, Hadoop, Tableau, Microsoft Business Intelligence Development Studio

### WORK EXPERIENCE

---

**Graduate Assistant, Graduate School, USC** Oct'14 - May'15, Aug'15 - Present  
Working as a part of 5 member team developing and maintaining 12+ Graduate School applications used by students, faculty and administrative staff. Worked on development of new versions of two web applications.

**Intern (Software Development), Cloud Licensing Team, Autodesk** June 2015 – August 2015  
Enhancing Automation Coverage of Cloud Licensing Services: Designing and development of an API to mock different services used by Cloud Licensing Service. Created 3 mock services which resulted in a 29% increase in automation coverage. Application added as a part of Continuous Integration.

**Software Engineering Analyst, Accenture (Avanade)** August 2011 – July 2014  
Worked as a full stack engineer on 3 different projects (and teams). Participated in development/enhancement of tools and web applications like Learning Management System, Project Cost Estimator, automatic service deployment, etc.

**Intern, Systems Department, Net4 India Ltd.** July 2010 – December 2010  
Mail4India: Worked in a team of 3 to replace legacy email system with an open source webmail product (SquirrelMail) used by 400,000 users every day. Development done in LAMP environment using PHP, Perl and MYSQL.

### ACADEMIC PROJECTS

---

**Project Minions (Directed Research project)** Spring 2016  
Project Minions is a combination of self-serving loyalty program, intelligent virtual pet and game play mechanics wherein users can earn virtual coins based on activity like buying goods/services, check-in's, exercising, etc.

**3D Graphics Rendering Library** Fall 2015  
Implemented 3D graphics rendering pipeline with 3D transformations, lighting, shading and accumulation buffer anti-aliasing. Used Linear expression evaluation rasterization algorithm to rasterize polygon mesh (triangle).

**Analysis of Twitter data using MapReduce/Hadoop** Spring 2015  
Developed a MapReduce solution to run analysis on 17.8GB twitter dump file. Ran modules such as sentiment/language/location/date/topic based analysis and recorded the performance gain over serial search.

**Operating System Kernel Development** Spring 2015  
Worked in a team of 4 to implement the kernel for Weenix operating system. Implemented bootloader, file system, threads, process management and virtual memory.

**Books and Movies Federated Ontology** Fall 2014  
Designed and developed a federated ontology to find interesting relationships between books and movies based on books. Created ontologies using Protégé and used Apache Jena server for running SPARQL queries online.