ASHUTOSH PAREKH

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EDUCATION

University of California, San Diego, USA *(Expected) Dec 2018*
M.S. in Computer Science - CGPA: **3.68/4.00**
Coursework: AI, Machine Learning, Recommender Systems, Neural Networks, Networked Systems, Data Analytics

D.J. Sanghvi College of Engineering, University of Mumbai, India *2012 - 2016*
B.E. in Information Technology - CGPA: **9.25/10.00**

EXPERIENCE

Software Engineering Intern, Salesforce, Inc. *June 2018 - present*
San Francisco, CA
- Working with the Big Data at Scale Cloud team on the HBase implementation and analytics for performance optimization.
- Adding functionalities to the Apache Phoenix Driver for more robust performance monitoring and error detection.

Graduate Teaching Assistant - Intro. to Discrete Mathematics *March 2018 - June 2018*
University of California San Diego, CA
- TA for the course CSE 20 - Intro. To Discrete Math under Prof. Daniele Micciancio during Spring 18.
- Responsibilities included holding office hours, discussions, grading assignments, handling Piazza and Gradescope.

Software Engineer, JPMorgan Chase & Co. *Jul 2016 - Aug 2017*
Corporate Technology, Mumbai, India
- Developed applications in Java using a micro-services architecture and deployed on the private cloud. This cloud adoption helped reduce infrastructure costs by around 60%. Implemented session replication, authentication, load balancing and Log aggregation and analytics service.
- Programmed a C# application to facilitate discounted early payment of invoices saving around 2-5% of total bill amount. Implemented file transfers, batch and scheduled job processing using SFTP, Mail Exchange and Scheduling APIs.
- Honored as one of the *top three* overall performers out of 180 Analysts from India.

TECHNICAL SKILLS

- **Languages and Frameworks**: C, C++ (STL), Java, Python, Go (basic), PyTorch (basic), Keras (basic), gRPC
- **Web Development**: Python Django, HTML, CSS, JavaScript, PHP, Java Spring, Ruby on Rails (basic)
- **Database Technologies**: SQL, NoSQL (basic), HBase (basic)

PROJECTS

SurfStore - Distributed Networked File Storage Service
- Created a file storage service where every file was divided into blocks and a distributed metadata store kept track of the correspondence between files and blocks.
- Implemented the 2 Phase commit protocol for replication consistency and fault tolerance of the distributed database.
- The application was built in Java leveraging gRPC for inter-node communication.

Image Captioning using Deep Neural Networks
- Developed a novel architecture where an additional RNN layer was introduced in between the CNN and LSTM layers for image captioning.
- The advantages and disadvantages of the new architecture were analyzed in detail using various metrics like BLEU score.

Ranking of DBpedia Entity Properties Using Machine Learned Ranking (MLR) Algorithms
- Ranks the various properties of a DBpedia Graph Database entity as per their relative importance.
- Supervised learning and the Random Forests Algorithm was used and implemented using Python and RankLib.
- Presented and published the paper *Heuristic Generation of Dynamic Quiz Game Using Linked Data and Gamification* at the International Conference on Inventive Computation Technologies (ICICT), IEEE, 2016.

Herein - Buyer and Seller Collaboration Web Portal
- Freelancing Project which enables craftsmen to setup a profile and provide their services to buyers.
- Implemented Social Auth, User Messaging and Review System, Search Functions, Dynamic Galleries and Job Posting System using Django and deployed it on Heroku PaaS using Amazon S3 for storage.

ACHIEVEMENTS AND EXTRA-CURRICULAR

- **ACM-ICPC Kharagpur Asia Onsite Regionals** - Rank 57/100 *2014*
- **ACM-ICPC Amritapuri Asia Onsite Regionals** - Rank 179/265 *2014*
- **JPMorgan's Code for Good Hackathon Mumbai** - Challenge Winner *2015*
- **Vice-Chairperson, Computer Society of India** - Best Student Chapter, DJSCE *2015*