Rajat Shah

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### Education

## Masters of Science, Computer Science

CGPA: 4.0/4.0

North Carolina State University, Raleigh, NC

Aug. 15 - Dec. 16

Relevant Courses: Machine Learning, Foundation of Data Science, Design and Analysis of Algorithms,
Artificial Intelligence, Algorithms for Data Guided Business Intelligence, Graph Theory.

Bachelor of Technology, Computer Science

Visvesvaraya National Institute of Technology, India

CGPA: 8.11/10.0 Aug. 10 - May 14

# Work Experience

Amazon

Seattle, WA

Software Development Engineer Intern

May 2016 - Present

- Implemented a novel approach for image clustering as a part of Imaging Research team.
- Integrated the module in Image Quality Assurance tool to significantly enhance automation.

### Center for Educational Informatics, NCSU

Raleigh, NC

Graduate Research Assistant

Sep. 2015 - Present

- Research in Educational Data Mining for automatic short answer grading using NLP and Machine Learning techniques.
- Publication: "Deep Learning + Student Modeling + Clustering: a Recipe for Effective Automatic Short Answer Grading", The 9th International Conference on Educational Data Mining (EDM2016).

Morgan Stanley

Mumbai, India

Software Analyst

Aug. 2014 - Jul. 2015

- Contributed in development of a reporting dashboard along with underlying Scala/Java service.
- Built a SOAP service for multi-threaded database access in a team of three, which was featured and showcased in the Global Town hall for its broad impact.

Goldman Sachs

Bangalore, India

Software Analyst Intern

May 2013 - Jul. 2013

 Optimized a market risk analysis tool by implementing caching layer and parallel computing to significantly reduce the execution time.

#### **Programming Skills**

Proficient: C++, C, Java, Python, JavaScript, HTML5, CSS3, AJAX, SQL, Git

Familiar: R, Scala, C#, Shell Scripting, PHP, Android

#### **Projects**

2016 Music Recommender System for Implicit Feedback Dataset.

- Collaborative Filtering approach using Apache Spark's MLlib library in Python.

2016 Handwriting Recognition and Generation.

- Trained ML models for handwriting recognition and studied application of RNNs for sequence generation.
- 2016 Adwords Placement using Bipartite Graph matching algorithms
  - Implemented MSVV, Balance and Greedy algorithm for comparative study of revenue maximization.
- 2015 Anomaly Detection in Time Evolving Networks using Signature Similarity for graph comparison.
- 2014 Lead Web Developer for Technical Symposiums and several clubs' websites in VNIT.

### Miscellaneous

- 2016 Teaching Assistant Introduction to Artificial Intelligence (CSC 411) at NCSU.
- 2014 Technical Secretary Member of VNIT Students Council.
- 2013 Vice-Chairperson ACM Student Chapter of VNIT.