

DEEPALI GARG

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<https://dplgrg.github.io>

TECHNICAL SKILLS

Programming Languages	C++, Python, JavaScript, Java.
Web Frontend	AngularJS, HTML, CSS, SASS, D3.js, Bootstrap, Gulp, Bower.
Web Backend	Java, SpringBoot, MySQL, Play framework, ActiveMQ.
Others	Amazon Web Services, Keras, PyTorch, Scikit-learn, TensorFlow, Github.

EDUCATION

University of Massachusetts Amherst

Expected December 2019

Masters in Computer Science

Courses : Machine Learning, Neural Networks, Algorithms for Data Science, Deep Learning for NLP

PROJECTS

Independent Study - Using Deep Learning to prevent Online Child Exploitation (Ongoing)

Worked under Prof. Brian Levine for classification and ranking videos to create a tool for law enforcement agencies for classifying Child Exploitation Material(CEM). Did transfer learning on Google's AudioSet model followed by multi-label classification after extracting log mel spectrogram features of audio extracted from files.

Tweet Question Clustering using Universal Sentence Embeddings

Created a modified QANet using Pytorch to create sentence embedding by training on the SQuAD dataset, utilizing question-answer context and generating character embeddings to produce sentence embeddings for tweet questions.

WORK EXPERIENCE

Amazon, Seattle

Summer 2019

Software Development Engineering Intern

- For the AWS Elastic Block Storage(EBS) Data Lifecycle Manager, I developed an auditor to determine policy non-compliance and failures to save developer time and accelerate failure remediation for millions of customers, reducing the time by 99.95%.
- Generated event for AWS Cloudwatch, filtered them across server nodes and transferring them to AWS S3 storage using AWS Kinesis Firehose, powered with real-time data processing and transformation by AWS Lambda and querying using AWS Athena.

Capital One, India

August 2016 - May 2018

Associate Data Engineer

- Developed and designed a large data quality web application called DataSense in AngularJS and D3.js which reduced the time for processing critical financial services data by 90% and saved the company \$700 million.
- Developed and maintained multiple REST APIs in SpringBoot for the Data Validation Tool software, accelerating processing of billions of rows of data by 85%.

CA Technologies (acquired by Broadcom Inc.), India

July 2015 - August 2016

Associate Software Engineer

- Developed UI for Service Desk Manager software in AngularJS replacing legacy UI and improved loading time by 40%.
- Created a microservice leveraging Elasticsearch's real-time and distributed search capability, combined with Play Framework and AngularJS. Researched and developed another prototype microservice using Apache Solr, seamlessly integrating it with legacy servers.