# Omkar Acharya

#### **EDUCATION**

## **North Carolina State University**

Raleigh, NC

Master of Computer Science

Aug 2016 - May 2018

GPA: 4.0 / 4.0

Coursework: Foundations of Data Science, Artificial Intelligence, Databases, Automated Learning & Data Analysis, Graph Theory, Business Intelligence

## **Pune Institute of Computer Technology**

Bachelor of Computer Engineering Aug 2012 – June 2016

GPA: 3.8 / 4.0

Coursework: Algorithms, Computer Networks, Data Structures, Software Engineering, Data Mining, Natural Language Processing

### **EXPERIENCE**

#### Quantworks Inc.

Raleigh, NC

Pune, India

Backend Developer (Co-Op)

Sept 2017 - Present

Technologies: Python, MySQL, Numpy, ARIMA

- Working on Time Series Analysis for Inventory Management System
- Automating the clinical data loading from medical records into database using RED-I APIs as a continuation of the internship work

#### Quantworks Inc.

Raleigh, NC

Graduate Intern

May 2017 - Aug 2017

Technologies: Python, C++, Adobe Acrobat SDK, NLTK, Pandas

- Designed a Smart Abstractor for scanned medical records
- Wrote automation plug-ins for highlighting and bookmarking
- Implemented RegEx to make the context based searching efficient
- Decreased the manual abstraction time from 3-4 hours to 15-20 mins

### **iKnowlation Research Labs**

Pune, India

Machine Learning Intern

Aug 2015 – Apr 2016

Technologies: Python, Deep Learning, ConvNets, LSTM, Nvidia Caffe

- Led a team of 4 for a project to generate video description in English
- Finetuned Nvidia Caffe models on Stanford's ImageNet dataset
- Trained Long Short-Term Memory models on MSCOCO dataset
- Improved the system's accuracy from 63% to 77%
- Awarded the **Best Project** in Deep Learning at Birla Institute, Goa

#### **CERTIFICATIONS**

- Machine Learning (Stanford University Andrew Ng)
- Mining Massive Datasets (Stanford University Jeffrey Ullmann)
- Computer Science 101 (Stanford University Nick Parlante)
- Web Apps Architecture (University of New Mexico)
- Introduction to Linux (Linux Foundations)

## **PROJECTS**

## **Yelp Photo Classification**

Technologies: Python, Caffe, Scikit-Learn Kaggle Rank: 134<sup>th</sup>, F1 score: 0.765 Trained a Convolutional Neural Network and built a Support Vector Machine classifier on Yelp's dataset using Caffe

#### **Sentiment Analysis**

Technologies: Python, Apache Spark Accuracy: Twitter 63.56%, IMDB 83.49% Built a Logistic Regression classifier Doc2Vec and Artificial Neural Nets

## **Settlement Mapping**

Technologies: Python, R, Weka, QGIS Cross Validation Accuracy: 80% Implemented Gaussian Mixture Models using Expectation Maximization algorithm and 1-Holt classifier

## Personal Health Manager

Technologies: Java, JDBC, Oracle SQL 11g Implemented database triggers for the unusual events and medical emergency

## **Leave Manager**

Technologies: HTML, CSS, PHP, MySQL Selected as the **Best Project** by undergraduate institute and replaced the existing paper based system

## **SKILLS**

Proficient: C++, Python, R, HTML Intermediate: C, Java, MySQL, Oracle 11g, CSS, Q, Scikit-Learn, Numpy, Pandas, Caffe, NLTK, Weka, Octave, Doc2Vec, Tableau, Adobe SDK, UNIX Familiar: Javascript, PHP, Apache Spark, Node.js, LaTeX

#### **ACTIVITIES**

- 8<sup>th</sup> in NCSU programming competition
- 47<sup>th</sup> in ICPC North America Qualifiers
- Volunteer at NCSU's Career Center
- NGO Deepastambha Charitable Trust