

JAIDEEP BHOOSREDDY

+1 (716) 328 3980 | jaideepb@buffalo.edu

[linkedin.com/in/jaideepbhoosreddy](https://www.linkedin.com/in/jaideepbhoosreddy)

Github | [@jbhoosreddy](https://github.com/jbhoosreddy)

EDUCATION

University at Buffalo, The State University of New York

Master of Science, Computer Science, June 2017 | 3.7 Cumulative GPA

Anticipated June 2017

Relevant Coursework: Algorithms for Modern Systems, Distributed Systems

Uttar Pradesh Technical University, Lucknow, Uttar Pradesh, India

Bachelor of Technology, Electronics and Communications Engineering, June, 2015

SKILLS

Languages: JavaScript, Python, Java, PHP, C, MySQL, MongoDB

JavaScript: Highly proficient in Node, React and Redux, AngularJS, BackboneJS, jQuery, etc. Experienced with many functional libraries like DataTables, ChartJS, Leaflet, Google Maps. **Python:** Highly proficient in Async Python 3. Experienced in Django, Flask, etc. Implemented Distributed Cache Manager using Flask and Celery for message Queues. Databases: **MySQL** and **MongoDB**. Proficient in Web Development in **PHP** (native and frameworks). Version Control with **Git** and **Mercurial**. Proficient with **C** and **Java**. Proficient in Mobile-first and responsive app development. Proficient in Hadoop, Spark and R.

INTERNSHIPS

Intern, Firefox Desktop, DevTools, Mozilla Corporation, San Francisco, USA, 05/2016 to 08/2016

- Worked on Responsive Design Mode, Console and Debugger Tools in Firefox Desktop DevTools.
- Worked with the latest JavaScript (ES6 & ES7) and CSS (3 & 4) technologies.
- Added Console support for Source Maps in Firefox Desktop DevTools.
- Added locations with source mapping in the new Console implemented using React and Redux.
- Worked on the new Debugger implemented using React and Redux.
- Conducted surveys with developers and contributors for features in Responsive Design Mode.

Intern, Novlr, London, UK

- Worked with the latest JavaScript technologies including NodeJS + ExpressJS, Angular, Angular Material.
- Added capability to export Ebooks in specification conformant Epub and Mobi format, handled entirely in JavaScript.
- Added capability to allow users to personalize the Ebook in-app in a responsive way.

Software Engineer, The Louis Berger Group, INC (USA), India, 07/2015 to 08/2015

- Developed the Project Management System – iMIS Web Application with PHP Codeigniter, MySQL and JavaScript.
- Implemented modules like Cash Accounting from Project Offices and calculation of Decision Sensitive Metrics.

JOB EXPERIENCE

Webmaster, Department of Mechanical and Aerospace Engineering, University at Buffalo, 02/2016 to present.

- Maintain the departmental website for MAE Department at UB. Currently writing and maintaining a comprehensive test suite for the web application to ensure there are no errors in the website.

Web Application Development Student Assistant, UB Information Technology, University at Buffalo, 02/2016 to present.

- Develop website in PHP, JavaScript and other web technologies to support the development team at UBIT.

RESEARCH EXPERIENCE

Research Intern, Text Analytics Research Group, South Asian University, India, 07/2014 to 07/2015

- Developed framework for analysis of research in academic institutes. Major Contributions include Data Analytics in R, Data Collection in Python (automation, web scraping), Web Development in PHP and JavaScript based data visualisation.

VOLUNTEERING

Instructor, Science is Elementary, 09/2015 to present

- Teach school children about science by performing science experiments with them.

For personal projects, continue on next page.

ACCOMPLISHMENTS

- Paper titled **A Sciento-text Framework to Characterize Research Strength of Institutions at Fine-grained Thematic Area Level** published in **Scientometrics** Journal.
- Published author of a novel titled **Dead Underground** and several short stories.

PERSONAL PROJECTS

University Select Plus

Python, R, PHP, JavaScript. Database in MySQL and File System

- Developed a web application to help guide prospective graduate students to choose their University by providing them detailed information about the research being done in leading Universities.
- Multiple machine learning and text analytics algorithms were used to extract meaningful information from academic research metadata. The output was linked to an intuitive web application for students. The application is built around RESTful API.

Lawoer

Python PHP, MySQL

- Developed a website for a team of Law School students who wanted to provide pro-bono service to clients by providing legal counselling to the clients.
- Implemented a **TF-IDF Cosine Similarity for ranked retrieval** (Vector Space Model) to retrieve the response based on responses to previous questions. Performed operations like Stemming to improve efficiency of the model.

Spell Correct

Python

- Implemented the widely popular algorithm for Spell Correction using Dynamic Programming (Damerau–Levenshtein distance) Probabilistic Language Models (NGrams) and confusion matrices.
- This algorithm can accurately correct spelling mistakes not only by similarity searching with a dictionary but also position based probability decision making use of NGrams.

Genetic Search Algorithm

Python

- Implemented the widely popular and interesting algorithm called Genetic Search Algorithm (a type of evolutionary algorithms). Applied the idea of Genetic Algorithm to rank web urls.
- This is an optimization algorithm which tries to apply the principles of DNA recombination and survival-of-the-fittest idea to find the approximately fittest (optimal) result from an extremely large state space.

Machine Learning

Python, R, MATLAB

- Implemented many Regression, Classification and the k-means clustering algorithms from scratch.
- Furthermore, utilised these programs in other projects like Author Identification, Gender Identification, etc.

COURSE PROJECTS

Distributed Systems

TLA+ and PlusCal

- Implemented models of Hybrid Logical and Vector clocks to check correctness of the algorithm.
- Implemented models of self-stabilizing token ring algorithms to check the correctness of the algorithm.

Introduction to Machine Learning

MATLAB

- Developed the Learn to Rank algorithm to rank web documents by using regression to rank documents.
- Developed a Bayesian Model to predict number of students in the Graduate School of CS in leading Universities.

Introduction to Information Retrieval

Java, Apache Lucene\Solr

- Social Media Analytics Dashboard built with AngularJS, Java, and Solr. Data include Twitter and News sources.

Advanced Machine Learning

Python, MATLAB, R

- Implemented a complex Bayesian Network (Probabilistic Graphical Models).
- Implemented different inference algorithms like Ancestral Sampling, Gibbs sampling, Variable Elimination.
- Further optimization of computation using Markov blankets.

Data Intensive Computing

R

- Performed exploratory data analysis in R on multiple heterogeneous datasets. Performed multiple regression modelling and density estimation techniques.