

JAIDEEP BHOOSREDDY

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EDUCATION

University at Buffalo, The State University of New York

Master of Science, Computer Science | 3.7 Cumulative GPA

Anticipated February 2017

Uttar Pradesh Technical University, Lucknow, Uttar Pradesh, India

Bachelor of Technology, Electronics and Communications Engineering

June, 2015

SKILLS

Expert: JavaScript: React-Redux, Node, AngularJS, etc. Also, many functional libraries like ChartJS, Leaflet, etc. Mobile development in React-Native. **Python:** Async programming in Python. Django, Flask, Celery, etc. **Databases:** MongoDB and MySQL. **Version Control:** Git and Mercurial. **Proficient:** PHP (Codeigniter), Java, Hadoop, Spark and R (see projects). **Familiar:** Ruby, C, C++.

INTERNSHIPS

Intern, Firefox Desktop, DevTools, Mozilla Corporation, San Francisco, CA,

05/16 - 08/16

- **Skills:** Latest JavaScript (ES7), CSS4, React-Redux.
- **Tools Improved:** Responsive Design Mode (RDM), Console, Debugger and DevTools Framework.
- Debugging in Firefox is difficult if the project uses a bundler (Lack of Source Map Support in Console). Added support in Firefox 50, used by developers around the world. Added locations w/ source-mapping in the new Console. mzl.la/2d6HqEE
- One of initial developers of the powerful new Debugger which debugs Firefox, Chrome, iOS, Node, etc. bit.ly/2dpaiFH

Full Stack Software Engineer/ Software Engineering Intern, Novlr, London, UK

03/16 - 5/16, 08/16 - present

- **Tools:** Latest JavaScript, NodeJS + ExpressJS, Angular, Angular Material.
- **Products Improved:** Publishing, Support, Editing and Framework
- Added a spec compliant Epub and Mobi export capability, allowing users to produce publication-ready novels for sale or distribution. Overhauling the publication UX flow to add personalization intuitively, ensuring users generate aesthetically pleasing novels before sending to Amazon. Created real-time support features for users.

Software Engineer, The Louis Berger Group, INC (USA), India,

07/15 - 08/15

- Using PHP Codeigniter, created the Project Management System to improve efficiency and simplify day-to-day operations.

JOB EXPERIENCE

Webmaster, Department of Mechanical and Aerospace Engineering, University at Buffalo.

02/16 - present

- Migrated the department website to another server and resolved issues during the process.

Web Application Development Student Assistant, UB Information Technology, University at Buffalo.

02/16 - 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.

07/14 - 07/15

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

VOLUNTEERING

Lead Instructor, Science is Elementary

09/15 - present

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

PUBLICATIONS

- 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.

For personal projects, continue on next page.

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.

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.

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.

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

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.

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.

Introduction to Information Retrieval

Java, Apache Lucene\Solr

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

Data Intensive Computing

R

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