

Deepak Bansal

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EDUCATION

Northeastern University , Boston, MA	Master of Science in Computer Science	2018	GPA 3.5/4.0
Ansal University , Gurugram, India	Bachelor of Technology in Computer Science and Engineering	2016	GPA 3.5/4.0

TECHNICAL KNOWLEDGE

Languages Python, Java, JavaScript, C++, SQL, HTML, CSS

Databases MySQL, MongoDB, Elasticsearch

Frameworks Spark, Hadoop MapReduce, Lucene, Polymer, AngularJS, ReactJS, Node.js, Git

WORK EXPERIENCE

Product Technology Manager **Google, Mountain View, CA** February 2019 – present

Google Shopping Ads: Designed, developed, integrated and maintained tools for Google Shopping Ads team.

- Developed tools for Google Shopping Ads team to produce the metrics on merchants and help them with increasing their revenue.
- Simplified access control system for faster development of the tools by adding a layer between the development platform and databases.
- Developed a platform for tool projects with status, requirements and stakeholders, so that anyone can volunteer to contribute in a project.

Google Brains: Implemented features on internal Applied Machine Learning platform at Google Brains on which other ML apps can be developed optimized for highly efficient resource usage.

Google Earth: Developed web platform features for Ground by Google Earth Geo, an open-source project in association with UN, Stanford University, etc.

Other: Developed features for internal intern recruiting and host matching platform in Java and JavaScript.

Software Engineering Intern **SessionM, Boston, MA** January 2018 – August 2018

Responsible for several integration projects using Java and JavaScript. Developed in a fast-paced test-driven environment with weekly sprints. The role involved coordinating internationally, debugging through a large codebase, interviewing and mentoring junior interns and acting as point of contact with multiple other teams. The teamwork helped drive multi-million-dollar investments.

- Developed features for Salesforce Service Cloud to integrate with SessionM Notes module using Apex, Aura and JavaScript.
- Designed, developed, documented and integrated Offers module for Salesforce Commerce Cloud using RESTful APIs.
- Reduced debugging time by designing, developing and deploying reports for automation environment using Java & TestRail.

Software Development Intern **Rivigo, Gurugram, India** May 2015 – June 2015

- Increased speed of gaining insights into data by developing Business Analytics Dashboard in Python, MongoDB and D3.js.
- Decreased customer service time by designing and developing customer facing website with help section in PHP & MySQL.

PROJECTS

Decision Tree training in Hadoop MapReduce Java, Apache Hadoop, Amazon S3, Amazon EMR
Implemented C4.5 Decision Tree classifier using parallel big-data processing using Hadoop MapReduce for Books-Crossing Dataset mined by Department of Computer Science of the University of Freiburg for predicting if a user of a particular age from particular location would like or dislike a book based on its author and year of publication.

CART Decision Tree for Supervised ML Python, CART Algorithm, Matplotlib, Pandas, NumPy, Scikit-Learn
Implemented a Decision Tree classifier for Supervised Machine Learning using Classification and Regression Tree Algorithm (CART) in Python based on Gini Impurity and Information Gain and prediction on test data with probabilities.

Path Planning App MATLAB, Probabilistic Roadmap (PRM) and Rapidly-exploring Random Tree (RRT) Algorithms
Implemented Sampling-Based motion planning algorithms RRT and PRM for Puma 560 robot for determining a path between a starting configuration of the robot and a goal configuration while avoiding collisions within a highly complex obstacle configuration space.

Plagiarism Detector Application Java, AngularJS, MySQL
Architected and Implemented app to detect if the code is plagiarized within two Java code projects using *Improved Plagiarism Detection Algorithm Based on Abstract Syntax Tree* by G. Tao, D. Guowei, Q. Hu and C. Baojiang that calculates the hash value for each node of the abstract syntax tree of the programs and compares the hash values for each node.

Media Base Website AngularJS, Node.js, Ember.js, MongoDB, Model View Controller, TMDb API, jQuery, Heroku
Developed MEAN stack web app in MVC pattern using The Movie DB API hosted on Heroku with two user roles that allow users to browse, sort, like, and critique movies and message, and follow other users. Integrated with Facebook and Google OAuth login.