Vikas Narasimha Murthy

720 W 27th St, Apt 201, Los Angeles, CA 90007
+1 (213) 298 4883 ; vikasnar@usc.edu
www.linkedin.com/in/vikasnar

EDUCATION

University of Southern California, Los Angeles, USA   **December 2016**
Masters in Computer Science
Courses: Applied Natural Language Processing, Artificial Intelligence,
Information Retrieval and Web Search Engines, Analysis of Algorithm GPA *3.68/4*

M. S. Ramaiah Institute of Technology, Bangalore, India   **June 2013**
Bachelor of Engineering , Computer Science and Engineering, GPA *8.92/10*

TECHNICAL SKILLS

Languages	Java, Python, C, SQL
Web	JavaScript, PHP, JSON, XML, HTML5, CSS3

PROFESSIONAL EXPERIENCE

Expedia Inc.   Seattle, USA
Itinerary Team *(Software Development Engineer I)*   2017-Present
- Designed and developed MVC web application using spring for providing customer with upgrades offers based on their current booking.
- Implemented a service that listens to a kafka queue and send email notifications to the customer about upgrade offers that are available.

Expedia Inc.   Seattle, USA
Itinerary Team (*Software Engineering Intern*)   Summer 2016
- Implemented a distributed cache in cloud using AWS that reduced the object load time in production by 70%.
- Developed RESTful service using Spring to update the cache and maintain data parity.
- Developed an internal tool to lookup and perform CRUD operations on objects in cache building the backend API in Spring Boot and frontend using Bootstrap, JS, jQuery, AJAX.

SAP Labs Pvt. Ltd   Bangalore, India
Cloud and Mobile Platform Team (*Associate Software Developer*)   2013-2015
- Designed and developed a framework and widget factory utils in java for an android mobile application, the framework would render UI based on a configuration XML fetched from the client.
- Developed new features such as Calendar view, Google maps integration and Offline mode for saving customer data when not connected to the internet using SQLite database which was synced with the backed server once the device was online.
- Enhanced the performance of the application by reducing the DB query time by implementing new flags in database tables based on region and roles.
- Designed scripts to perform Load Testing of the application using the HP Load Runner Tool.

Center for Artificial Intelligence and Robotics, DRDO   Bangalore, India
Application Developer Intern   Summer 2013
Smart Assistance for Mobile Soldiers
- Developed a mobile application to provide a virtual view of popular monuments in India with voice based navigation to assist the armed forces during terror attacks.
- Application was developed in Java for Android platform and would store data in a SQLite database.

ACADEMIC PROJECTS

- **Comment Summarization for Social Media Post (Python)** Developed a system that could automatically summarizes the comments by selecting the most representative comments from a large collection of user-contributed comments. Applied various techniques such as topic clustering based on LDA and ranking comments using precedence based ranking to identify the important and informative comments within each cluster.
- **G Search (Solr, PHP, JavaScript)** Developed a Google Like search Engine for the USC college website. Crawled the web pages using crawler4j, indexed them using Apache Solr. Used two different ranking algorithms (Pagerank and Lucene) to rank the indexed web pages. The search engine had features such as spell corrector and auto suggest.
- **Hotel Review Classifier (Python)** Developed a naïve Bayes Classifier to identify a given hotel review to be either truthful or deceptive, and Positive and Negative using a model that was generated by analyzing a corpus of data.
- **The Game of Mancala (Java)** Designed a Game Playing Agent to determine the next best move for a given board state using various algorithms such as MinMax and alpha beta pruning.
- **Weather Forecast (JavaScript/PHP)** Developed a Web application to retrieve the weather forecast given a location, where the front end was developed using HTML5 and CSS3 and Bootstrap for responsive design JavaScript for client side and PHP for server side scripting, the application was hosted on Amazon AWS.
- **Part of Speech Tagger (Python)** Designed a part-of-speech tagger for Catalan using Hidden Markov Model. The tagger tags the data based on its learning from analyzing the training data.
- Developed an **Inference Engine (python)** in First Order Language used for Data Mining to determine whether a given statement can be inferred from a given set of statement using Backward Chaining.