

DEEPAK KYASARALLI THIMMAPPA

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OBJECTIVE

To work in the domain of Computer Science adding to my software design, development and analysis skills while benefitting the growth of the company through my expertise.

EDUCATION

University of Colorado at Boulder	M.S in Computer Science	Expected graduation: Spring '18 GPA: 4/4
B.M.S College of Engineering, India	B.E in Computer Science	Graduation: Spring '16 GPA: 9/10

RELATED COURSEWORK

Machine Learning, Object Oriented Analysis and Design, Natural Language Processing, Data Mining, Network Systems, Foundations of Software Engineering, Database Systems, Secure Web Programming, Analysis and Design of Algorithms

TECHNICAL SKILLS

Programming Languages	Java, C, C++, C# and Matlab
Frameworks and Scripting languages	Django, Spring, JUnit, scikit-learn, Keras, TensorFlow, Hibernate, Python, HTML5, JavaScript, MySQL, PHP and CSS
Tools	perf, Git, perforce, TraceView, Android Studio, IBM Rational Application Developer and Eclipse

PUBLICATIONS:

"A Proof of Concept Implementation of a Mobile Based Authentication Scheme without Password Table for Cloud Environment" in Advance Computing Conference (IACC), '15 [IEEE International](#)

"Vehicle Number Plate Recognition System: A Literature Review and Implementation using Template Matching" in [IJCA](#) (International Journal of Computer Applications, January '16)

Teaching Assistant **Dept. Of Computer Science, University of Colorado, Boulder Aug '17- Present**
Teach undergraduate students for the course "Starting computers: Introduction to programming". Carried recitations for class of 100 students.

Grader **Dept. Of Computer Science, University of Colorado, Boulder Aug '16 - May '17**
Grade undergraduate students for the course "Starting computers: Introduction to programming". Helped students learn course by resolving queries

WORK EXPERIENCE

Java Developer Intern **Anthem. Inc.** **July '17- Present**
Designed and developed a feature which improved the Decision Engine which is responsible for management of approvals of health insurance requests by allowing requests for specific procedures to be eliminated from review. Was involved in end to end testing of the system by validating XML requests in Java and generating appropriate responses.

Languages: Java, JEE, Spring, Hibernate and Drools **Platform:** Windows 7 **Tools Used:** IBM Rational Application Developer, SOAP UI and Toad Database tool

Technical Summer Intern **Morgan Stanley** **Summer '15**
Developed, analyzed and optimized a new solution to expedite the management of current customers' financial account database thus improving the speed. This solution eliminated the manual redirection of data across teams. Responsibilities involved creating both the User Interface and the database management

Languages: Java, JEE and Spring **Platform:** Windows 7 **Tools Used:** Eclipse, Perforce and IBM DB2.

Developed applications using web development languages. I was responsible in creating a platform to enable digital storytelling as a tool for education.

Languages: HTML, CSS and JavaScript **Platform:** Windows 7

ACADEMIC PROJECTS

Server-Client system using UDP: A C application consisting of server and client using UDP to transfer messages across network. Reliability was implemented using ACK and NACK messages and with the help of timeout to avoid transmission of duplicate packets. The application used encryption to transfer packets between server and client.

Languages: C **Platform:** Ubuntu

Image Captioning: A machine learning project to automate image captioning. The model is trained over Convolutional Neural Network and Recurrent Neural Network to analyze image and produce relevant captions.

Languages: Python(Keras, TensorFlow) **Platform:** Ubuntu

Life Wisely: A web application developed using the Spring framework and hibernate with PostgreSQL for backend. The application helps students create groups to complete assignments, create study groups and have reminders for daily tasks to simplify management of schedule.

Languages: Java, Spring, JDBC **Platform:** Windows 10

Automation of student selection: Developed a software system to automate process of student selection for an apprenticeship program of my university using the Django framework with PostgreSQL for the backend. Our project received an appreciation for being one of the best projects.

Languages: Python, Django **Platform:** Ubuntu

SSSP Graph Database: Implemented Dijkstra algorithm to find the shortest path between two nodes in a graph database. The development was done completely in C language with efficient memory usage.

Languages: C **Platform:** Ubuntu

ANPR System : Developed an Automatic number plate recognition system in the Matlab programming language. This can be used to create a database of entry and exit time of vehicles in educational institutions, thereby offering automated protection against the theft of vehicles.

Languages: MATLAB **Platform:** Windows 7

BMSCE Android app: An android application dedicated to my undergraduate college. The app verifies user by login where credentials are encoded into JSON to avoid human interference. The app aims to help students and teachers by providing news, syllabus and information about current affairs.

Languages: Android, PHP **Platform:** Android

Service One: A web application which uses single sign on to authenticate user for various services. Two factor authentication was in place which required the android application on the user's phone. The development received appreciation by being accepted in the IEEE Journal.

Languages: HTML, Android, PHP **Platform:** Browser based

Course Registration System: A system for students to have easy and efficient Online Course Registration. The system had list of courses which would be displayed once student has logged in using university serial number.

Languages: Java, JDBC, MySQL **Platform:** Java Application

Assignment Submission System: Developed from UI till backend, an online course registration system which would help faculty and students in dealing with assignments. Separate login was in place to differentiate services available for student and faculty.

Languages: HTML, CSS, PHP, MySQL **Platform:** Browser based