BIKRAMJIT MANDAL

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EDUCATION

Masters' **Expected Dec, 2016**
Computer Science
University of Texas Dallas(UTD) **GPA: 3.242**

- •Object Oriented Design
- •Database Design
- •Statistical Analysis and Design
- •Algorithms analysis and design
- •Bigdata Analytics (Hadoop and Spark)
- •Machine Learning
- •Information Retrieval
- •Web Design and Development

Bachelor of Technology (B. Tech) **May 2013**
Computer Science and Engineering
National Institute of Technology (NIT) Raipur, India

PROFESSIONAL EXPERIENCE

SME (Subject Matter Expert) **Amdocs Pvt. Ltd., Pune, India** **June,2013-July, 2014**
Software engineering, implemented backend software integrations using Java, Perl, Shell scripting in the Linux/Unix environment. Developed robust software modules to analyze distributed environments and their load-balancing. Also, developed Java based software to track and maintain software environments using Git, as a part of Innovation Team effort.

Java Developer Internship **Globus Soft Pvt. Ltd., India** **May,2012-June,2012**
Developed a Java based RCP application to implement business crawler, to procure, track and update data from online product catalogues, and developed a mini search-engine to easily search through this data.

Teaching Assistant (CS1335, Computer Science I) **University of Texas at Dallas** **Jan, 2016 - July, 2016**
Responsible for grading, evaluation and consultation for projects, assignments and homeworks for the Computer Science I course for Non-majors under Dr. Karen Doore.

SKILLS

- **Languages:** Java, Scala, Python, JavaScript, Ruby on Rails, Unix/Linux Shell Programming
- **Frameworks:** JSP/Servlets, MongoDB, Django, Hadoop, MySQL 5.6, UML Design
- **Tools/IDE:** Git, BitBucket, AWS, Eclipse, Netbeans, Visual Paradigm
- **Github:** https://github.com/bikdroid

ACADEMIC PROJECTS

- **Search Engine Index Compression (Java, Stanford core NLP, Linux)** **Fall 2016**
  Lemmatization of valid tokens and storage. Implemented dictionary compression using ***Front Coding***. Postings lists and specific document statistics were compressed using ***Gamma and Delta compressions*** respectively. Reduction of approximately 65% was evident after compression in full index size for the Cranfield dataset was observed.
- **Data Mining, Analysis and Tracking from online sources (Python, Django, MongoDB, AWS on Linux)** **Summer 2016**
  An online hosted web app, that provides live data analysis from numerous job sites, academic sites about the students and alumnus. Application allows to perform numerous operations and sorting.
- **Website Fingerprinting Counter attack – Big Data (Python, Numpy, Hadoop, full ETL pipeline)** **Spring 2016**
  The task was to develop a website fingerprinting counter attacking analyzer. Primary goal was to analyze pcap logs and classify data using Ensemble methods for machine learning temporally. Implementation of Machine Learning classification techniques to provide a temporally improving model for better online-attack analysis. We achieved an average 70% accuracy at best using our Ensemble of classifications.
- **Friends detection and recommendation system (Spark, Scala)** **Spring 2016**
  Developed a software to recommend new friends based on the given friend lists dataset for multiple users of a social network site. Also, involved procuring details about the suggestions. (Also implemented using Hadoop MapReduce)
- **Health and Recipes Share and Micro-Blogging website (Java, HTML5, JavaScript, JSP, MySQL – Agile UP)** **Spring 2016**
  I Developed a web application to post, blog and share recipes. Implemented a search tool to search most relevant recipes according to ingredients available to the user. Project was developed in 3 iterations following Agile based Object Oriented development patterns. Technologies used were Java, JSP/Servlet, MySQL.
- **CarGo - Used Cars buy and sell REST application (Ruby on Rails, JavaScript)** **Fall 2015**
  Ruby on Rails based web-application to buy and sell used cars, along with Craigslist like abilities and interface. Developed following Agile methodology and in a duration of 3 weeks. Followed integration testing approach, and developed in a team of 2.
- **Twitter user data analysis (Java, Linux, Machine Learning)** **Fall 2015**
  Analyzed a large twitter dataset containing user tweets, and applied clustering algorithms to cluster the tweets based on different similarity functions into groups of related tweets. Achieved an approximate 88% accuracy using k-Means clustering.
- **Flights Management System (Java, JSP, JDBC, MySQL 5)** **Spring 2015**
  Developed a web-application to manage and display flights, passenger details, booking information with simple database search feature. The front-end was designed with CSS, JQuery with server-side Java coding and MySQL server for DBMS.
- **DBMS Indexing System techniques (Java)** **Spring 2015**
  Implemented a Database record indexing system using Java, and it's storage as binary files serialized into files. Also, developed an interface to use the created indexing methods to perform CRUD operations over provided data.

PERSONAL PROJECTS

- **Money2020, Las Vegas, 2015:-**
  Developed a one-stop shopping and payment application VRVR based in Virtual Reality and IoT, implemented the payment gateway using MODO Payments API (PHP, java).
- **AT&T Foundry Hackathon, Feb 26-27, 2016: (Android SDK, Harman Sound SDK)** **Spring 2016**
  Designed and developed a Sound based assist "Daredevil" that can sense obstacles and movement of the user and provide voice assist for movement inside a closed area. The project can be a huge aide to the visually impaired and alzheimer's affected. HackUTD (Project : Ges-Stat) :- Gesture controlled Nest thermostat app, using LEAP Motion hardware and API, Java and NodeJS. (https://github.com/bikdroid/Ges-Stat)
- **Teller-Alfred** **Fall 2015**
  NLP based chatbot, to use the Capital One API and illustrate banking operations based on taking inputs from the user via chat.
- **Winner at Infosys Aspirations2020 Coding Competition, 2011 regional rounds and competed at final round at Infosys Pune, India.**