

Devanshu Singh

thisisdevanshu@gmail.com | 352-870-9010 | www.linkedin.com/in/devanshusingh2 | New York, NY 10019

EDUCATION

University of Florida, Gainesville, Florida

August 2017 - December 2018

Master of Science, Computer and Information Science Engineering

CGPA: 3.74 / 4.0

Relevant Coursework: Design & Analysis of Algorithms, Advanced Data Structures, Machine Learning, Distributed Systems

Graduate Teaching Assistant - Math for Intelligent Systems

National Institute of Technology, Jamshedpur, India

August 2010 - May 2014

Bachelor of Technology (Hons.), Electronics and Communication Engineering

CGPA: 8.95 / 10.0

Relevant Coursework: Signals and Systems, Digital Image Processing, Computer Networks

WORK EXPERIENCE

Data Science Developer - Barclays, New York

February 2019 - Present

- Responsible for writing transformation jobs for data from various data providers using python, Apache Spark and Amazon Web Services.
- Design and build a framework that can automate the spark jobs and is capable of monitoring and sending out notifications.

Technology Summer Analyst - Barclays, New York

June 2018 - August 2018

- Built the data delivery platform for distributing research to the clients using Spring framework and MariaDB for backend and AngularJS, Semantic CSS and HTML5 for the UI.
- Designed and implemented the failover and load balancing mechanism for the scheduled jobs for data delivery platform.
- Implemented the SFTP (Secure File Transfer Protocol) delivery service for the data delivery platform of Barclays Research department.

Senior Software Engineer - Talentica Software, Pune

September 2015 - July 2017

- Designed and implemented the backend for the web and android apps of various startups using Spring Framework and hibernate.
- Reduced the latency of RESTful APIs down to 40% by optimizing PostgreSQL queries and adding Redis based caching system.
- Improved the search relevance of Elasticsearch based search platform by dynamically boosting the queries at runtime.
- Implemented user-management/security modules using token-based authentications (JSON Web Tokens) and Spring Security.

Software Engineer - Mahindra Comviva, Gurgaon

September 2014 - August 2015

- Built 'Unstructured Supplementary Service Data' products for the various telecom operators of South & Southeast Asia.
- Developed USSD based CRBT (Caller Ring Back Tunes) subscription module, for 'Airtel India', using Java/J2EE.
- Implemented 'Telecom Regulatory Authority of India' regulation of second-consent from users of 'SIM-Toolkit' for Idea Cellular.

PROJECTS

- **Cryptocurrency using blockchain** - The project, written in Elixir, was a 100 node system where nodes competed(Proof of Work) with each other to generate the next block of the blockchain and thus mined bitcoins. The blocks contained transactions made between wallets that were created using public private key pair.
- **Landmark detection using Deep Convolutional Neural Networks** - The data set was collected manually and contained over 3000 images. The app recognized 14 landmarks of the University of Florida and used Inception V3 neural network model from TensorFlow.
- **Hyperspectral Image Segmentation using various clustering algorithms** - The pixels of the image were 178 dimensional and PCA (Principal Component Analysis) was used to reduce dimensionality before segmenting.
- **B+ Tree** - Implemented a custom database index using B+Tree. The B+Tree ensured $O(\log n)$ time complexity for the retrieval of records from the database. The entire B+Tree was built in-memory and was tested for over 1 million records.
- **Hybrid App** - Developed a hybrid app that was written in AngularJS and then iOS/ Android apps were generated using Ionic Framework. The iOS/Android had the features of native apps, like camera functionalities. Parse sdk was used instead of writing the backend from scratch.

SKILLS

- **Languages:** Java, C, C++, Python, Elixir, MySQL, PostgreSQL, HTML, CSS, JavaScript, AngularJS
- **Technologies:** Pyspark, NumPy, Pandas, SciKit, MLlib, Hadoop, Spring Boot, Kafka, RabbitMQ, Redis, TensorFlow, Elasticsearch, MATLAB, Git, Ionic Framework, REST, Hibernate, JPA, Design Patterns, Amazon Web Services, Linux, Maven, Blockchain, OAuth

ACHIEVEMENTS

- **Achievement Award** - Awarded scholarship from Herbert Wertheim College of Engineering
- **National Science Olympiad Scholar** - Recognized among the top 500 students of India for academic excellence by Science Olympiad Foundation.