

Akshay Jain

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EDUCATION

UNIVERSITY OF CALIFORNIA, IRVINE

MS in Computer Science

Expected March 2017 | Irvine, CA

GPA: 3.86/4

INDIAN INSTITUTE OF TECHNOLOGY,
HYDERABAD

B.Tech in Computer Science

2009-2013 | Hyderabad, India

GPA: 8.56 /10

SKILLS

PROGRAMMING:

- Python • C • C++
- C# • Java • Matlab

TECHNOLOGIES:

- MapReduce • Docker • Cassandra
- AWS • RabbitMQ • TensorFlow
- Celery • Search Engine • Lucene

COURSEWORK

GRADUATE

- Distributed Systems
- Distributed Transaction Systems
- Machine Learning
- Optimization
- Bayes Data Analysis
- Image Understanding

UNDERGRADUATE

- Database Management Systems
- Operating Systems
- Networks
- Mathematics Behind Machine Learning
- Data Structure and Algorithms
- Algorithms
- Advanced Algorithms
- Big Data

EXPERIENCE

ACUSENSE

Full Stack Engineer Intern

June 2016 – Sep 2016 | Palo Alto, CA

Acusense is a start up that provides advanced computer vision to help the enterprises search and discover precise multimedia in real time.

- Designed the full stack of the product using **RabbitMQ**, **Celery**, **Cassandra**, **Twitter API**, **Instagram API**.
- Created a **Machine learning** and **NLP** based tool to correlate images and videos to text.
- Automated the complete deployment pipeline, scaling and load balancing using **Dockers**, and **AWS ECS**.

MICROSOFT

Software Engineer | Cortana and Bing Search

June 2013 – June 2015 | Hyderabad, India

- Learned about different components of **Search Stack** like **Query Analysis**, **Ranking Algorithms**, **Local Entity Results**.
- Created the **Personalized Restaurant Recommendation** experience on Cortana.
- Designed and implemented the **Travel Planner** experience powering trip information like flight details, currency conversion rate for foreign trips, weather forecasts, handling notifications for delayed flights, news and weather alerts.

AMAZON

Software Engineering Intern

May 2012 – July 2012 | Hyderabad, India

THESIS

DEEP LEARNING ARCHITECTURES IN CHEMOINFORMATICS

Prof. Pierre Baldi | Mar 2016 – Present | UCI, CA

Creating a deep network architecture in **TensorFlow** to predict the aqueous solubility of molecule. Model consists of an ensemble of **Recursive Neural Networks** associated with all possible vertex-centered acyclic orientations of the molecular graph.

PROJECTS

MUBASE, DATABASE MANAGEMENT SYSTEM

Oct 2011 – Nov 2011 | <https://github.com/akshaybetala/Mubase>

Implemented a mini Database Management System in C++ with buffer pool manager, storage mechanisms, disk management system and relation manager along with B+ tree indexing.

COLLABORATIVE EDITOR

Mar 2016 – June 2016 | <https://github.com/akshaybetala/CollabEdit>

Created an online collaborative editing tool in **Python** and **JavaScript**. Used a partially persistent data structure in the client side to sync across multiple clients.

TEXT-CENTRIC DATA MANAGEMENT SYSTEM

Mar 2016 – June 2016 | <https://github.com/TextDB/textdb>

Designed and created a text centric database over **Lucene** in **Java**. Created operators like Keyword Search, Phrase search with the support of Spans.