

Engineering and Science for Search, Relevance and Discovery

## EXPERIENCE

**Staff Software Engineer, Search, TomTom Location Technologies GmbH - Berlin, Germany** 09/22 - Present

- All things Search, Multi-Tier Search Architecture, Staff Engineering Community, Relevance, ML
- Lucene, Vespa, OpenSearch, ...

**Principal Software Engineer, OneSearch, HERE Technologies - Berlin, Germany** 09/18 - 08/22

- All things Search, relevance, ontologies, custom scoring/(re-)ranking, scalability, low-latency, distributed computing, core algorithms, query rewriting/planning, BYOD (search as a platform)
- Tools: Lucene, Java, Python, Scala, Kubernetes

**Senior Software Engineer, Search & Personalization, Zalando SE - Berlin, Germany** 10/16 - 08/18

- Core Search systems and API architecture, design and engineering. Engineering and architecture for data ingestion, tracking, query-understanding, re-scoring, machine-learned and personalized re-ranking, result-interleaving, tracing and relevance evaluation
- Ownership of core infrastructural services including Elasticsearch (previously Solr) clusters, Kafka, search gateway service

**Search and Analytics, Getit Infoservices Pvt. Ltd. - Gurgaon, India** 09/14 - 09/16

- Search, Data and Backend Systems, Technology Strategy as first IC hire in subsidiary: Askme.com
- Tools: Elasticsearch/Lucene-core, Kafka, Spark, PostgreSQL, MySQL, Neo4j, Redis, Scala, Python

**Senior Software Development Engineer, Expedia, Inc. - Gurgaon, India** 04/13 - 09/14

- Map-Reduce analytics pipelines, A/B Test analytics, Custom Hive plugins, UDFs/UDAFs, NRT APM analytics engines, Parsers/IOFormats, FSTs
  - Technical leadership, technology evaluation and selection for the analytics stack
- Tools: Hadoop, Hive, Java, SQL Server, Spark

**Technical Lead, Search, Cleartrip.com - Bangalore, India** 01/12 - 03/13

- **Search and Recommendations** Engine design and implementation for Cleartrip's travel research and planning offering (SmallWorld).
  - Data acquisition (**crawling**), aggregation and **de-duplication** framework for geographical data from multiple sources
  - Extensive customization of **Lucene** for controlled **relevance**
  - Built a near-real-time platform for search and analysis of **geographical** data
- Skills: Algorithms + Data Structures, Java, C++, Lucene internals, OpenNLP, Neo4j, Mahout, JavaCC, Redis, MongoDB, Ruby

**Search Architect, S. S. E., Naukri.com (Info Edge (India) Ltd.) - NOIDA, India** 04/08 - 01/12

- Architecture and development of single **search platform** and its integrations underlying all core offerings;
- **information retrieval** (acquisition, preprocessing, relevance, filtering, ranking, aggregation)
- **information extraction** (heuristics, rule-systems, supervised and unsupervised structure learning and analytics, matrices)

Skills: Algorithms + Data Structures, Java, C++, Lucene internals, JavaCC, PHP

**Software Development Engineer (BI), Microsoft India (R&D) Pvt. Ltd. - Hyderabad, India** 10/06 - 04/08

**Associate, Technology (BI), Sapient Corp. Pvt. Ltd. - Gurgaon, India** 02/04 - 08/04

## TECHNICAL PROFICIENCY

- *Conceptual Areas:* Information Retrieval, NLP, Machine Learning (for Text and Search), Distributed Systems, Data Engineering, Databases, Algorithm Design and Analysis
- *Programming Languages:* Scala, Java, Python, ...
- *Tech:* All major Search Engines, RDBMS, NOSQL, Streaming (Kafka, Flink), Spark

## ACADEMICS

### Graduate Education (2004-2006)

Institution: Indian Institute of Technology, Madras, Chennai, India  
Degree Program: **Master of Science in Computer Science and Engineering**  
CGPA: 8.0/10.0

### Undergraduate Education (1999-2003)

Institution: Morehouse College, Atlanta, GA, USA  
Degree Program: **Bachelor of Science in Computer Science with minor in Mathematics**  
CGPA (CS): 3.70/4.00 CGPA (overall): 3.34/4.00

### K-12 Education (1985-1999)

Institution: Modern School, Barakhamba Road, New Delhi  
Board: CBSE

## HONORS, ACHIEVEMENTS AND ACTIVITIES

- **Info Edge Star Award** for Contributions to the Search Platform and its applications (2011)
- **Microsoft IT Deliver-IT award**, Microsoft, Hyderabad (2008)
- **Appreciation for Dev Community Contributions**, Microsoft, Hyderabad (2008)
- **Award for Outstanding Performance**, Dept. of Computer Science, Morehouse College (2003)
- **Second Place, Programming Contest**, Division Two - ACM Southeast USA Region (2001)
- **Third Place, Programming Contest**, Division Two - ACM Southeast USA Region (2002)
- **First Place, Computer Science Olympiad**, Spelman College (2003)
- **First Place, Programming Contest**, Atlanta University Center (2001)
- **Full Academic Scholarship**, Morehouse College (Fall 1999 - Spring 2003)
- **Best Computer Programmer**, Modern School, India (1998 - 1999)
- **Excellence in Organizational Ability**, Modern School, India (1998 - 1999)
- **President**, Computer Science Club, Morehouse College (2001 - 2002)
- **Captain**, Programming Team, Modern School, New Delhi, India (1998 - 1999)

## CONTACT INFORMATION

Location: Berlin, Germany

Email: [adichad@gmail.com](mailto:adichad@gmail.com)

Web: <https://www.github.com/adichad>, <https://www.linkedin.com/in/adichad>