ANKIT CHAUDHARY

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Mobile: +491 764 163 5159 Current Location: Berlin, Germany.

EDUCATION QUALIFICATION

Ph.D. in Computer Science (June 2019 – August 2025), TU Berlin, Germany

Title: Optimizing Continuous Queries in the Edge-Cloud Continuum

M.Sc. in Computer Science (2012-2014), TU Kaiserslautern, Germany

Specialization: Information and Communication systems

B.Eng. in Information Technology (2005–2009), GGSIPU, Delhi India

Specialization: Information Technology

PROFESSIONAL EXPERIENCE

Databases and Information Systems group at TU Berlin, Germany

June 2019 - Present

Research Associate

- Built a new stream processing system for edge-cloud infrastructure called NebulaStream (more on www.nebula.stream).
- Responsible for developing and maintaining query optimizer and coordinator components.
- Implemented modules for query validation, rewrites, multi-query optimizations, operator placement, and query life-cycle management.

Dilax Intelcom GmbH, Berlin Germany

Oct. 2016 - May 2019

Solution Architect/Sr. Data Engineer

- Backend development in Java for creating data pipelines for ingesting and analyzing real time event stream from IoT devices.
- Setting up big data infrastructure for performing analytics and machine learning.
- Improving CI and CD infrastructure.

TeraData GmbH (R&D Multimedia), Munich Germany

Oct. 2014 - Sept. 2016

Software Engineer

- Backend development in Java, Scala & Go for a distributed SaaS system for AdTech.
- Worked on speed & batch layers of Data Lake following Lamda Architecture.
- Wrote MR jobs for cleaning terabytes of data and stream processing jobs for consuming event streams.

Fraunhofer IESE, DFKI, and ICSY Kaiserslautern, Germany

Feb. 2013 - Sept. 2014

Student Assistant

- Fraunhofer IESE: Modifying and extending the standard HBase source code to integrate policy-based access management system.
- DFKI: Maintenance of the Java-based open-source recommender system called MyCBR.
- ICSY: Development of a Java-based general purpose inter-cloud framework for checkpointing and migration of applications.

Ericsson Ltd. (GSC) Delhi, India

Sept. 2009 – July 2012

Sr. Software Engineer

RADII, QoS-KPI, and End-of Selection network monitoring tools

- Monitoring tools for different telecommunication equipment used by Network Operation Controller for monitoring telecommunication infrastructure.
- Used SNMP and Ericsson's proprietary protocols to collect network stats for analysis, reports, and rule-based email/SMS alert generation.
- RADII was competing with existing enterprise level applications such as HP's NNMi & OVO NMS systems.

Involved in the rollout of Mobile Number Portability (MNP) Implementation in India.

- Developed tools for generating configurations for bulk updating network equipment to support MNP.
- This tool helped save a significant number of person-hours and expedite project implementation.

SOFTWARE SKILLS

Programming Languages : C++, Java, Rust (elementary), Scala (elementary), Go (elementary)

Big Data Tech. : Hadoop (Yarn), HBase, Storm, Flink, Spark, Kafka, Elasticsearch, Cassandra

Version Control : Git (hub/lab), SVN

Build Management : Jenkins, Github Actions, Maven, Gradle, Nexus, VCPKG **Frameworks** : Spring-Boot, Parquet, Avro, Capnp, Docker, Puppet

PUBLICATIONS (more on Google Scholar)

The NebulaStream Platform: Data and Application Management for the Internet of Things (CIDR 2020)

Steffen Zeuch, **Ankit Chaudhary**, Bonaventura Del Monte, Dimitrios Giouroukis, Haralampos Gavriilidis, Philipp M. Grulich, Sebastian Breß, Jonas Traub, Volker Markl

Incremental Stream Query Merging (EDBT 2023)

Ankit Chaudhary, Jeyhun Karimov, Steffen Zeuch, Volker Markl

Incremental Stream Query Placement in Massively Distributed and Volatile Infrastructures (ICDE 2025)

Ankit Chaudhary, Kaustubh Beedkar, Jeyhun Karimov, Felix Lang, Steffen Zeuch, Volker Mark

Incremental Stream Query Deployment under Continuous Infrastructure and Query Changes (VLDB 2026)

Ankit Chaudhary, Felix Lang, Danila Ferents, Varun Pandey, Nils Schubert, Kaustubh Beedkar, Jeyhun Karimov, Steffen Zeuch, Volker Mark

PROFESSIONAL ACHIEVEMENTS

- Best Paper Award at ICDE 2025
- Honourable Mention Award at VLDB 2023
- Ericsson Ace Innovator Award Q3 & Q4 of 2011
- Ericsson Ace Innovator Award Q3 & Q4 of 2010