

# SHUYUAN ZHAO

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## PROFILE

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Data Engineer Professional with 4+ years of industrial experience in designing and developing Business Intelligence tools. Experience with distributed systems operating in a scalable/high volume environment. Adept at problem solving, critical thinking and programming background with proficiency in Java, Python, SQL, Spark, ClickHouse. Passionate about using data to improve the world around us and building products with great business impact.

## SKILLS

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- **Programming:** Java, Python, Scala, SQL
- **Big data:** Spark, ClickHouse, Yarn, Hive, OLTP/OLAP
- **Middleware:** Redis, Elasticsearch, Zookeeper, Thrift, Message Queue

## WORK HISTORY

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**ByteDance | Big Data Engineer, Beijing** 2019.12 - Current

- Responsible for architecture design and implementation of the next generation BI tools which help advertisers gain business insights and power their long-term success.
- Own projects and responsible for the full software development life cycle including requirements collection, technical designs, implementation, testing and operations.
- Build robust and scalable distributed systems and data integration pipelines using SQL, JAVA, Spark, ClickHouse for real-time analytics and offline data processing.
- Create complex SQL queries utilizing best query-writing practices.
- Develop the back end of websites, build databases such as MySQL, ES, Abase(RocksDB), and provide APIs for internal and external used.
- Collaborate with product managers and other technical teams in designing and deploying competitive marketing initiatives and impactful digital strategies.
- Conducted researches and deep dived into ad-hoc issues with fast action for troubleshooting and effective presentation for customer consulting.

**Iconma | Data Analyst, Richmond, VA, US** 2018.2 - 2019.11

- Worked at the brand and marketing credit card department in Capital One Bank.
- Performed segmentation analytics for marketing campaigns and customer management with SQL and BI tools.
- Conducted A/B testing on business strategies and analyzed their performance.

## PROJECTS

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**Advertising Effectiveness Measurement** ByteDance

- Provided detailed overview of campaign performance and determined the true effectiveness of marketing strategies by analyzing impressions, engagement, frequency, placements, ROI, online-to-offline sales impact.
- Developed scalable and fault tolerance Spark applications based on Spring framework for data transformations and data analysis.
- Designed and developed data processing pipelines which involved in data loading, writing Hive UDFs and conducting operative practices on Spark performance tuning.

**Audience Segmentation and CRM tools** ByteDance

- Performed audience segmentation and built customer relationship management(CRM) system to organize and make sense of valuable audience data and insights.
- Performed real-time analytics for audience size estimation, audience profiling, drill down analysis with ClickHouse RocksMergeTree engine and processed petabytes of data within seconds.

## EDUCATION

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**The George Washington University, Data Science, Master of Science** 2015.8 - 2017.5

**Central South University(中南大学), Statistics, Bachelor of Science** 2011.9 - 2015.6