# **ZHUOQUAN CHEN**

Mobile: 718-300-0078 | Email: zhuoquan1223@gmail.com | Location: New York, NY

LinkedIn: www.linkedin.com/in/zhuoquanchen

#### PROFESSIONAL SUMMARY

- Develop and implement scalable and efficient data engineering solutions to support business needs.
- Adept at SQL, Python, and Java programming, with a strong foundation in both OLAP and OLTP relational databases.
- Design and implement ETL processes to extract, transform, and load data from various sources.
- Utilize programming languages such as Python and SQL for data manipulation, analysis, and visualization.
- Machine learning knowledge includes natural language processing, supervised and unsupervised learning.

# **WORK EXPERIENCE**

Data Analyst Feb 2021 – Aug 2023

MetTel, New York, NY

- Analyzed, calculated, and quantified customers' wireless data usage before the monthly billing cycle. Identified optimal
  solutions for customers and updated the bulk wireless data usage plans of mobile devices through SQL on the backend,
  achieving significant cost savings of 30%-80% for those with excessive data usage.
- Managed relational databases, applying SQL skillsets to retrieve, insert, update, and clean up large datasets for customers.
- Collaborated with product management and development teams to improve product quality by verifying the accuracy of
  customer data, troubleshooting, and tracking issues in both the development and production phases.
- Investigated and resolved billing anomalies and variances, ensuring reasonable data charges by calling carrier APIs to traceback and identify the original location of data consumption from users' mobile devices.
- Executed the launch of Redshift data warehouses using AWS SDK boto3 in Python, enabling programmatic creation, configuration, and management of AWS infrastructure services, conducted ETL operations on Redshift for data ingestion using dimension modeling, resulting in a significant 25% reduction in workload. Optimized table joins and data processing time for the Business Intelligence team.
- Used Bruin platform (a SaaS platform in Telecommunication Expend Management) to manage clients' spending on telecommunications such as controlling devices, wireless, and data costs.

Data Analyst Aug 2018 – Jan 2021

Financial Aid Office of BMCC, New York, NY

- Orchestrated the collection of source data, adeptly extracting, integrating, and organizing information from diverse sources, while providing data support to other departments in a readily accessible format.
- Managed student data explorations and cleaning processes, and transformed raw data into consumable, high-quality information that's ready for analytics.
- Applied insightful analysis to historical student application data, ensuring data integrity, accuracy, and empowering relevant departments with data-driven decision-making capabilities.
- Collaborated with senior analysts to conduct exploratory data analysis and generate actionable insights.
- Modernized and streamlined the school's database, optimizing data entry processes and ensuring that student data was readily
  available in a user-friendly format for financial counselors to utilize in their services.

#### **Software Developer (Intern)**

Jun 2020 - Sep 2020

Runlu E-commerce, New York, NY

- Gained valuable hands-on experience in the field of data analysis, providing robust support to senior data analysts in the
  extraction of meaningful insights from both structured and unstructured data sources.
- Played a pivotal role in data cleansing and transformation tasks, proficiently employing Python for enhanced data quality.
- Utilized sentiment analysis and harnessed Natural Language Processing (NLTK) techniques to evaluate customer satisfaction, delivering an impressive 80% increase in efficiency compared to human-driven efforts.

## ADDITIONAL WORK EXPERIENCE

# Graphic Design Freelancer, Art Director, Design Director

New York, NY & Guangzhou, China

- Designed, served & developed brands for 100+ companies, including Fortune 500 companies.
- Collaborated with a team of 20+ professionals & gained a 100% success rate on all projects and deliverables.
- Responsible for 30+ different districts of Guangzhou Power Supply Bureau VI design renovation project, 2010.
- Won the design bid for the first multi-function exhibition hall project of the Power Supply Bureau, 2012, China.
- Won the design bid for the office material decoration design for the P&G South China Head office, 2014, China.
- Won the design bid for the P&G Annual Convention of 2014, Guangzhou, China.

#### **REWARD**

#### The Quality of Fountain Water Research Project of NYC

The research team led by Dr. Bulley

- Conducted fountain water collections across all five boroughs of New York City, gathering samples from over 500 diverse
  locations, which encompassed public schools, parks, private stores, and various other sites, subsequently subjecting these
  samples to rigorous quality testing, which encompassed parameters such as pH levels, nitrates, and nitrites.
- Established a robust database and data modeling to meticulously store the resulting data records.
- Leveraged Geographic Information System (GIS) tools to seamlessly integrate the database, allowing for the visualization of all data points on a map, complete with detailed information specific to each fountain location.
- Created a user-friendly application with the purpose of empowering individuals to access and review fountain water information at specific locations.
- Won the CUNY Research Program Scholarship for the 2017-2018 academic year in recognition of these achievements.

## **EDUCATION**

Brooklyn College, New York, NY

Aug 2016 – Jun 2020

Bachelor of Science in Computer Science

# PROFESSIONAL SKILLS

- Programming Languages: Python, SQL, Java, HTML/CSS
- Data Analysis Tools: Numpy, Pandas, Matplotlib, Seaborn
- Database Management: MySQL, Microsoft SQL Server, PostgreSQL
- Cloud platform: AWS (Redshift, S3, Glue, Athena), GCP
- Machine Learning: Scikit-learn (classification, regression, clustering)
- Deep Learning: Keras (image recognition)
- Natural Language Processing: NLTK
- Microsoft Suite: Microsoft Word, Microsoft Excel, Microsoft PowerPoint
- Adobe Creative Suite: Adobe Photoshop, Adobe Illustrator

## **PORTFOLIOS**

- Data Science: https://zhuoquan-chen.github.io/portfolio
- Graphic Design: https://zhuoquanchen.github.io