# Vikram Rao

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## EDUCATION

**University of Washington** — Seattle, WA
*Master of Science in Data Science; GPA: 3.90* — *Sep. 2013 – Dec. 2014*

**IIT Madras** — Chennai, India
*Bachelor of Technology in Computer Science; GPA: 3.80 (9.50/10.0)* — *Aug. 2009 – July. 2013*

## EXPERIENCE

**Amazon** — Seattle, WA
*Data Engineer* — *Apr. 2018 – Present*

- **AWS Redshift**: Optimized data warehousing solutions with AWS Redshift, implementing partitioning and indexing strategies to reduce query times by 30% and improve analytics performance
- **Data Pipelines**: Designed and deployed ETL pipelines for real-time analytics using Kinesis, processing large-scale datasets to support inventory tracking and reduce data latency by 35%
- **Dashboards**: Created and maintained BI dashboards for inventory tracking, integrating with internal tools to provide real-time insights and improve operational efficiency by 25%

**Twitter** — San Francisco, CA
*Software Engineer* — *Jan. 2015 – Mar. 2018*

- **Ad Analytics**: Developed advanced analytics tools for ad performance, leveraging machine learning to optimize targeting and increase ad revenue by 15%
- **Streaming Data**: Built and optimized streaming pipelines for tweet data using Storm, handling millions of events daily and reducing processing latency by 30%
- **APIs**: Designed and deployed REST APIs for real-time analytics, enabling seamless data access for internal tools and third-party integrations
- **Fraud Detection**: Developed and implemented anomaly detection models for bot detection, leveraging machine learning to reduce fraudulent accounts by 20%

**Open Source Contributions** — Remote
*Contributor* — *2014 – 2017*

- **ML Libraries**: Contributed to XGBoost for gradient boosting, adding features for large-scale model training used in production environments
- **Visualization**: Developed Chart.js components for data visualization, enabling interactive charting for over 400 open-source projects
- **Blogging**: Authored over 50 technical blog posts on data pipelines, machine learning, and scalable systems, widely read in the tech community

**Capgemini** — Chicago, IL
*Data Analyst* — *Summer 2013*

- **Risk Models**: Built and validated risk assessment models for finance clients, achieving high accuracy and enabling data-driven investment strategies
- **Reporting**: Developed and deployed Tableau dashboards for client reporting, automating data visualization and improving reporting efficiency

## PROJECTS

- **Fraud Detection**: Built an anomaly detection system for payments
- **Visualization**: Created tools for real-time data visualization
- **Forecasting**: Designed a demand forecasting model for retail
- **ETL Pipeline**: Developed a scalable data integration framework

## PROGRAMMING SKILLS

- **Languages**: Python, Java, SQL, JavaScript, Scala    **Technologies**: AWS, Kinesis, Tableau, Hadoop, Spark