

Manan Buddhadev

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Work Experience

Software Development Engineer 2

Amazon Web Services (AWS)

Jan 2023 – Present

- Leading a cross-functional team to bridge the gap between design and manufacturing, ensuring Bill of Material (BOM) perfectly match design specs.
- Singlehandedly migrated Bill of Material (BOM) ingestion from a third-party tool to complete AWS owned data platform saving the company ~\$20M.
- Implemented a mechanism to identify savings in mechanical components used in datacenters leading to savings upwards of \$20M.
- Worked with multiple AWS Partners to ensure smooth onboarding to ingestion tools and APIs.
- Architected and implemented API enhancements, expanding data collection, and enabling near real-time supply chain risk identification.
- Guided junior engineers on design principles, code review techniques and professional development.
- Spearheaded review standardization initiatives, leading the team to deliver high-quality, risk-free code.
- Mentored an intern on design thinking, coding best practices, and project management, contributing to exceptional performance and return offer.
- **Technological Stack:** Java, Redshift, DynamoDB, AWS Lambda, S3, Athena, Git, Oracle PLM

Software Engineer 2

Microsoft

Jan 2019 – Jan 2023

- Led cross-functional effort across Azure to optimize data storage and processing, saving \$30M annually.
- Architected a centralized data catalog across Azure, simplifying data discovery and governance for multiple teams and projects.
- Migrated the team's big data platform to Apache Spark for improved compliance with regulatory requirements saving ~\$125B.
- Built a data platform monitoring over 1 Exabyte of data enabling better data accuracy and quality using alarming.
- Collaborated on an open-source project – SyncKusto, that enables users to synchronize their Kusto entities from local devices to Azure Kusto.
- Championed GDPR compliance by implementing data hashing and encryption for all datasets containing personally identifiable information.
- Implemented key features for the data catalog website, such as pagination, tag-based filtering, and markdown support, improving user experience.
- Automated service and website deployments using CI/CD pipelines, reducing manual intervention leading to better deployment speeds.
- Reduced manual effort by 85% by designing a console application that analyzes data computation usage and identifies cost-saving opportunities.
- Developed an anomaly detection system to identify failing data pipelines and trigger timely alerts, preventing data loss and service disruptions.
- Created a natural language processing model to analyze customer tickets and identify trends correlated with service incidents.
- Recognized as a top interviewer for university recruiting, contributing to talent acquisition and team growth.
- Mentored interns on system design, code quality, and building scalable solutions, contributing to their professional development.
- Managed and provided continuous guidance to new recruits during their training period, accelerating their onboarding into the team.
- **Technological Stack:** C#, SQL, T-SQL, Azure, Python, Scala, Spark, REST, Cosmos DB, Azure DevOps, Git, Reach, Node.js

Software Developer – Conversational AI

SAP

Oct 2018 – Jan 2019

- Developed a log visualization tool, enabling efficient analysis and leading to improved interpretation of chatbot interactions by 20%.
- Enhanced bot utterance recognition, significantly reducing false positives and boosting communication accuracy.
- **Technological Stack:** Java, Python, Flask, HANA/S4, NLP, Git

Software Development Engineer Intern

Amazon

Aug 2017 – Dec 2017

- Architected, developed, and tested a novel trouble ticket analysis bot, empowering automation and reducing operational workload.
- Implemented pattern matching and machine learning techniques within the bot, automating data extraction and boosting team efficiency by 30%.
- Drove the project from conception to production, showcasing ownership and technical expertise in system design and software development.
- **Technological Stack:** Java, DynamoDB, AWS, Git

Process Automation and Optimization Scientist Intern

Conduent

May 2017 – Aug 2017

- Normalized, cleaned, and documented complex data (>50 attributes), fueling reliable models and insights.
- Designed and implemented an algorithm leveraging operator activity data to accurately measure productivity.
- **Technological Stack:** R, SQL Server, R Shiny Server

Software Developer

Ravi Group of Companies

June 2014 – June 2015

- Successfully transitioned the inventory system improving operational efficiency and improving data accessibility for stakeholders.
- Architected and built a custom CRM tool, optimizing sales processes for increased lead generation and conversion success.
- **Technological Stack:** C#, .NET Framework, SQL Server, MS Access, ERP

Education

Master of Science (M.S.) in Computer Science

Rochester Institute of Technology

Aug 2018

Bachelor of Engineering (B.E.) in Information Technology

University of Mumbai

May 2014

Skills

- **Programming/Scripting Languages:** Java, Python, C#, R, Scala
- **Databases/Query Engines:** SQL, Azure Data Explorer (Kusto), DynamoDB, MySQL, Apache Spark
- **Data Science Tools:** Pandas, NumPy, Scikit-learn, NLTK, Keras, TensorFlow
- **Visualization Tools:** Python (Plotly), PowerBI, ggplot2
- **Cloud Tools:** AWS, Microsoft Azure