Nelson Torres

SOFTWARE ENGINEER

(615) 997 4743 — nelsontorresjr330@gmail.com — Mt Juliet, TN 37122 - nelsontorresjr330.github.io - linkedin.com/in/nelsontorresjr330/

I'm a Vanderbilt University alum with a Master's in Computer Science & an MTSU alum with a B.S. in Computer Engineering and Applied Physics (Computer Science concentration). Currently, I am working towards my PhD in Computational and Data Sciences with MTSU where I anticipate researching AI / ML technologies & I am also working full time as a Senior Software Developer with Amazon.

Skills

- Data Manipulation – SQL, Apache Spark, Hadoop, AWS (DynamoDB, Kinesis, RDS, S3, Redshift),
- Full-Stack – Back-end (PostgreSQL/NoSQL, Spring Boot, FastAPI), Front-end (React, Vue,js, BootStrap, Node)
- Cloud Based – AWS (Lambda, EC2, RDS, DynamoDB, Redshift, API Gateway, CloudWatch, CodeDeploy, SageMaker)
- Programming Languages – Python, Java, Typescript, JavaScript, C++, PHP, Swift
- AI / ML – AWS SageMaker, Torch, Pandas, SciPy, NumPy, Matplotlib, Scikit-learn
- Misc – PLC Programming, SCRUM Master / AGILE Management, Kubernetes, Airflow, Docker, Linux systems, Git, On Call

Work Experience

Amazon - Nashville, TN

Senior Software Developer (SDE3) - @TVNelson   (Jun 2024 –Present)

- Currently with Workplace Health & Safety team developing an AI/ML based Computer Vision project to determine the overall ergonomics of Amazonian associates.
- Previously developed a proprietary AWS SCADA System & began deployment on numerous Gen11 ARS sites. This involved data modeling, configuring PLC connections, assisting with commissioning work & onsite visits.
- Served as the dedicated SCRUM Master. Coordinated daily standups & maintained project ace for a team of 14 engineers through biweekly Retros. As well as expedited code review timelines through daily check-ins.
- Utilized numerous AWS & Amazon exclusive cloud, CI/CD & source control technologies. Services include Lambda for development, CloudWatch for debugging and Querying through DynamoDB.
- Supported the development of an ML based PLC data modeling service through a mix of PLC Programming, Python, Java, React (TypeScript & JavaScript) & SQL.
- Regularly handled OnCall services for the team. This involved overnight availability in the event of an emergency, as well as debugging and working through incoming support tickets.

IPro Systems - Nashville, TN

Full Stack Software Developer   (Aug 2022 – Jun 2024)

- Worked on developing numerous projects over my time ranging from Back End Data ETLs utilizing FastAPI to Front-end UX/UI changes built off Node and Vue.js. Products were utilized by dozens of tenants, each with thousands of daily consumers.
- Refactored a massive Data ETL from a legacy system to optimize performance by leveraging Java, Apache Spark & SQL, resulting in thousands saved in Cloud Compute costs every month.
- Handled data migration to transition client into newest suite of products, utilizing numerous ETL technologies to map, format, update and transfer their data such as AWS (Redshift, Lambda, EC2), Apache Spark (Python & Java), Apache Hadoop and SQL.
- Maintained & regularly updated CI/CD pipelines through AWS (Code Build, Code Pipeline), Git (Bitbucket), Docker, Kubernetes and Apache Airflow DAGs.

Education

Doctorate: Computational and Data Science – Middle Tennessee State University
Murfreesboro, TN: Aug 2025 – Present

Master's: Computer Science – Vanderbilt University
Nashville, TN: Jan 2023 – May 2024

Bachelor's: Computer Engineering & Applied Physics – Middle Tennessee State University
Murfreesboro, TN: Aug 2018 – Dec 2022