

Kevin Mendoza Tudares *(they/them)*

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Skills

Expertise: Big fan of maintainable code, developer productivity, and continuous delivery. Strong Linux administration skills. Well versed in security standards and the secure development lifecycle. Vim user.

Technologies: Bazel, Gradle, Docker, Kubernetes, QEMU, KVM, TeamCity, GitLab CI, NGINX, gRPC, Splunk, GCP, AWS, Azure, Redis, MongoDB, PostgreSQL, Snowflake, Cassandra, Elasticsearch, Airflow

Frameworks: Node, React, Angular, Tensorflow, Flask, PyTorch, dbt

Languages: Python, Bash, Java, Rust, SQL, C/C++, Go, Kotlin, JavaScript, TypeScript

Experience

Tableau Software

SEATTLE, WASHINGTON

Software Engineering MTS

August 2023 – Present

Enhanced developer productivity for users of Tableau's Bazel-based build system with improvements to debugging and integrating with Visual Studio, Xcode, and other IDEs. Promoted maintainable Python coding practices within the team via static checkers (mypy) and improved test coverage. Integrated code coverage tools (Bullseye) and static analyzers (Coverity) into builds, then deployed and maintained pipelines for weekly product test coverage and vulnerability reports. Led code scanning efforts across the company's tech stack for FIPS 140-2 compliance.

Software Engineering AMTS

August 2022 – July 2023

Championed security-first development practices and documented threat models for active services of Tableau's monolith build team. Designed solution to detect and mitigate Log4j vulnerabilities in artifact repositories. Resolved inefficiencies in CI builds and Bazel remote caching saving over 3 hours per build. Updated the build to produce macOS ARM releases.

Software Engineering Intern

June 2021 – September 2021

Implemented a streamlined solution for versioning and distributing artifacts within Tableau's 400+ modular codebases. Inspired adoption through beta testing 5% of modules. Reduced solution's code size by 95% and achieved over 99% test coverage. Managed release of Tableau 2021.3's modular code.

Northwestern University McCormick School of Engineering

EVANSTON, ILLINOIS

Undergraduate Research Assistant (*tiilt Lab*)

September 2019 – June 2022

Architected a scalable, cross-platform, multimodal system for Minecraft enabling eye tracking and speech-to-text interfaces. Managed a team to integrate tangible, gesture, and EEG-based interaction. Organized group studies using the platform as means for collecting rich data to understand human cognition, spatial reasoning, and computational thinking. Published paper to HCI 2021.

Undergraduate Research Assistant (*Prescience Lab*)

September 2021 – March 2022

Developed a port of the Nautilus AeroKernel from x64 to RISC-V to explore the architecture's application in massively-parallel environments. Refactored the kernel's codebase into a modular and hardware-agnostic framework to enable a port to ARM. Contributed to paper presented at SC21.

RigUp (*now Workrise*)

AUSTIN, TEXAS

Software Engineering Intern

June 2020 – August 2020

Deployed a data discovery and metadata engine using Flask, React, Neo4j, and Elasticsearch. Enhanced the application by implementing SSO and email notifications. Scheduled serverless functions using Airflow for automated metadata ingestion from Snowflake and Tableau.

Argonne National Laboratory

LEMONT, ILLINOIS

Data Science Research Intern

June 2019 – August 2019

Coordinated a migration of streaming time series data from Cassandra to PostgreSQL(+TimescaleDB) with zero downtime. Investigated correlations between temperature sensor error and environmental factors to calibrate a machine learning model for error correction, improving accuracy by more than 60% using Python and scikit-learn.

Education

Northwestern University

EVANSTON, ILLINOIS

Master of Science (MS) in Computer Science (4.000/4.000)

September 2021 – June 2022

Bachelor of Science (BS) in Computer Science (3.964/4.000)

September 2018 – June 2022