

# Eduardo Morales

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## Education

University of Illinois Urbana Champaign – B.S. in Mathematics and Computer Science, GPA: 4.0 Expected May 2026

## Skills

**Languages:** Go, TypeScript, JavaScript, PHP, C, C++, Python, SQL

**Technologies:** Git, Docker, AWS (Amazon Web Services), Terraform, Firebase, Datadog, Vue.js, React, Express, Tailwind CSS, pandas, NumPy, Matplotlib

## Experience

**Software Engineer Intern, Enova – Chicago, IL** June 2024 – Aug 2024

- Developed an API in Go, receiving repository metadata from GitHub's Webhook API to automate sending Slack messages regarding new pull requests and code reviews, accelerating pull request and code review workflow by 42%
- Created 7 on-premise PostgreSQL tables to store pull request metadata and track developers who are subscribed to the pull request service and funneled the information into Datadog, showcasing over 60% of developers use the service
- Provisioned a new Wharf instance utilizing Terraform to manage private endpoints and authorized IP addresses, reducing CI/CD churn and increasing container deployment velocity by 15% during the development to production pipeline

**Software Engineer Intern, Nextcloud – Stuttgart, Germany** Nov 2023 – May 2024

- Engineered an API in PHP to extend legacy MySQL databases to support storing file metadata, resulting in version history and author being displayed for each file, with support to display different file metadata in the future
- Increased product's accessibility functionality on 14 Vue.js components by adding focus-traps and keyboard listeners, leading to a BITV certification, garnering new contracts with customers who wanted to use the product within universities
- Implemented a 'Personal Files' view by filtering out shared resources returned by WebDAV queries made in TypeScript, allowing users to differentiate between shared or personal files and folders easily
- Refactored Vue.js menu component to re-render every 30 minutes, fixing sub menu's time-reliant actions to be accurate
- Collaborated with 12 engineers, maintaining CI/CD on an open-source content-collaboration product with 2.2M users

**Data Analyst Researcher, University of Illinois Chicago – Chicago, IL** June 2023 – Aug 2024

- Examined 20 gigabytes of patent data spanning over 3 decades, using pandas to create dataframes relating to remote job positions, yielding a finding of the 10 most valued developer skills and traits from online job postings
- Discovered an average 12% increase yearly since 2019 in new remote job positions, using Word2Vec to find associated documents created from patent and job dataframes, concluding that patents from 2 years prior led to the increase
- Researched the relationship between unemployment and the number of yearly granted patents within the U.S. using Python, finding a positive 1:1 correlation between unemployment percentage and the number of granted patents

## Projects

**Workout and Strength Progression Tracker – Go, AWS, PostgreSQL, Tailwind CSS** github.com/emoral435/swole-goal

- Implemented AWS RDS to store user workouts on the cloud, using SQLC and GoMigrate for SQL database migrations, enabling users to track and measure their weightlifting progression and have their workout templates persist
- Developed an API in Go, using JWT for API call authentication, ensuring user metadata is securely updated and displayed
- Integrated GitHub Actions for CI/CD pipelines, ensuring 80% test coverage and consistent linting

**File and Message Sharing Platform – TypeScript, React, Firebase, Tailwind CSS** github.com/emoral435/nano-byte-media

- Used Firebase to store sensitive user information on the cloud, allowing users to send and store files and providing 3 different ways of secure authentication to log in, enabling users to have flexible login options
- Deployed a social media website with Firebase and React to enable chatting between 2 authenticated users
- Integrated cross-platform usage and mobile-friendly views by using React MUI components and Tailwind CSS

**Optimized Routing Between University Building Locations – C++**

- Programmed an application using Dijkstra's algorithm to find optimized routes between 15 university buildings, displaying the buildings with an overlay, decreasing average travel time between campus buildings for users

## Leadership

**Treasurer and Web Administrator, LOGICA** May 2023 – May 2024

- Collaborated with John Deere, Shure, Discover, and CME Group to host a 3 day technical convention, giving Latinx students opportunities to meet with recruiters and increasing the companies the diversity and equity values