

Nathan R. Perez

Website: NathanPerez.dev | LinkedIn: linkedin.com/in/nathanperezr/ | Github: github.com/NathanPerezR
E-Mail: NathanPerez.Business@gmail.com

EDUCATION

The University of Texas at Dallas, *Bachelor of Science in Computer Science* | **GPA: 3.88** Expected Graduation May 2025
Midland College, *Associate in General Studies* | **GPA: 4.0** May 2023

EXPERIENCE

Tyler Technologies, *Software Development Intern* May 2023 – August 2023

- Designed and implemented full-stack overhaul to **React JS / SQL** web-app that managed resource projections for 16 quarters
- Validated new calculations through tests against ~4,000 records
- White-Boarded database architecture changes with team to facilitate addition of customized inputs to projection model
- Improved data integrity with normalization and relational principles in **Microsoft SQL Server**
- Revamped 3 front-end dialogs with new features and a modern user interface design with Material UI
- Leveraged **Agile Development** principles with Jira, while maintaining a multi-branch **Git** workflow with team
- Developed asynchronous **REST API** with promised-based requests using **Node.js** and **Axios**
- Wrote and published Confluence documentation over new database structure, react components, and outstanding issues
- Collaborated and communicated with primary stakeholders on a weekly basis to design, prototype, and deploy an updated version of the application.
- Responsible for aiding in deployment to production
- Presented final product with coworker to department members using PowerPoint

ACM Research, *Research Participant* January 2023 – May 2023

- Contributed to 10-week **Natural Language Processing** project with ACM Research, *HateDeception: Using Adversarial Learning to Deceive Hate Speech Detection Models for Twitter*
- Responsible for the cleaning, lexical analysis, and visualization of 32,000 records with **Python**, **NumPy**, **Pandas**, and **NLTK**
- Successfully decreased large language model (LLM) detection rate by 20% while preserving semantic integrity of sentences
- Implemented EDA and GloVe algorithms on Twitter data, used **Matplotlib** to interpret results
- Delivered presentation to audience of 30+ highlighting key findings and outcomes

Bush Tennis Center, *Receptionist* September 2019 – January 2023

- Keyholder, Trained 5 members of staff and 35+ volunteers, managed 17+ volunteers
- Worked in a fast-paced environment managing 18 tennis courts and 8 pickleball courts for 75 people an hour

Midland College, *Mathematics Tutor* January 2022 – October 2022

- Taught mathematical skills for 10+ classes including Statistics, Algebra, Trig, Pre-Calculus, Calculus I & II
- Conveyed intricate concepts in colloquial terms, while instructing group review sessions of 3+ participants

PERSONAL PROJECT

Account Aggregator,

- Led team development of financial aggregator which visualized transactions with data collected from **Stripe API**, allowing for overview of accounts such as Bank of America, Vanguard, American Express and 12,000+ participating institutions
- Charts created using **Recharts**, fluid animations with **Spring**, component primitives from **Radix UI**, styled with **SCSS**

My Pomodoro, https://github.com/NathanPerezR/my_pomodoro

- Native windows application for tracking time
- Built in **Flutter** using **Dart**, UI/UX design follows Google's Material UI standard

Flags of the United States, <https://main--elaborate-khapse-3bc884.netlify.app/>

- Informational website which shows users the various state flags of the United States and their history
- React JS** web app, uses wikipedia's REST API to load all information, **CI/CD** with **Netify** and **Github**

Personal Website, nathanperezr.github.io

- Personal portfolio website created to showcase skills and personal projects that are not related to academic work
- Created with **CSS**, **HTML**, **Bootstrap 5**, and pre-planned in **Figma**

SKILLS

Languages: C, C++, C#, Java, Javascript, TypeScript, Python, SQL, HTML, CSS, SCSS, Dart

Frameworks: React JS, Flutter, Bootstrap 5

Tools: Git, Github, Jira, SSMS, IIS, Visual Studio, VS Code, Google Collab, Deepnote, Node.JS, Linux