Nathan R. Perez

linkedin.com/in/nathanperezr/ NathanPerez.Business@gmail.com | github.com/NathanPerezR
nathanperez.dev

EDUCATION

University of Texas at Dallas   Jan 2023 - May 2025
Bachelor of Science of Computer Science | **3.8 GPA**   *Richardson, TX*

Midland College   Jan 2021- Dec 2022
Associate of General Studies | **4.0 GPA**   *Midland, TX*

RESEARCH

HateDeception: Adversarial NLP | *Python, PyTorch, NumPy, Pandas, NLTK*
- Responsible for the cleaning, lexical analysis, and visualization of 32,000 records before & after augmentation
- Successfully worked within a team of 3 to decrease large language model (LLM) detection rate by 20% while preserving semantic meaning of tweets
- Implemented EDA and GloVe algorithms on 32,000 Twitter records, using Matplotlib to interpret results
- Delivered presentation with 5 other students to audience of professors, students, and researchers

WORK EXPERIENCE

Software Development Intern   May 2023 - Aug 2023
Tyler Technologies   *Plano, TX*
- Designed and implemented full-stack overhaul to React JS / SQL dashboard which calculated and stored resource projections for 16 quarters.
- Developed asynchronous REST API with promised-based requests using Node.js, Axios, & SQL
- Communicated with 2 senior developers and 1 manager in daily stand-ups regarding progress
- Improved data integrity with normalization and relational principles in Microsoft SQL Server
- Collaborated with primary stakeholders on a weekly basis to design and prototype the application.
- Leveraged Agile Development principles with Jira, while maintaining a multi-branch Git workflow with team
- Revamped 3 front-end dialogues with new features and a modern user interface with Material UI
- Wrote and published Confluence documentation over new database structure & ReactJS components
- Responsible for aiding in live deployment to production

K-12 English and Math Tutor   Jan 2023 - Feb 2023
The Tutoring Center   *Carrollton, TX*
- Tutored with K-12 students on Math, Physics, Grammar and Compression

Mathematics Tutor   Feb 2022 - Oct 2022
Midland College   *Midland, TX*
- Taught and supported the development of mathematical skills in classes including Remedial Math, Quantitative Reasoning, Math for Teachers I & II, Statistics, College Algebra, Trigonometry, Pre-Calculus, Calculus I and Calculus II
- Instructed group review sessions of 3+ participants for exams

Receptionist / Admin support   Sep 2019 - Jan 2023
Bush Tennis Center   *Midland TX*
- Communicated information regarding our outreach program and nonprofit activities to patrons
- Worked in a fast-paced environment managing 18 tennis courts and 8 pickle-ball courts
- Familiar with club systems at the Administrator level, including but not limited to running reports, contacting clients based on reports, mass communications, membership, Refunds, Equipment management, Account Merging, Staff info, Event creation, Court bookings, Custom payments, Lesson management, Staff Scheduling
- Marketed and sold memberships, lessons, clinics, rackets, tennis string, add-ons, and camps to customers
- Key-holder, trained 5 new hires in client interactions and 35+ volunteer's in general duties
- Tennis Racquet stringer, an average time of 30 mins per racket with 10 rackets per week, totaling 1,000+ racquets

Scholarships

2023 CMD-IT/ACM Richard Tapia Conference Scholarship: 900
UTD Transfer Scholarship & Phi Theta Kappa Scholarship: 900
UTPB Undergraduate Research Grant: 900
UTPB Undergraduate Research Grant: 900
UTD Transfer Elite Scholarship: 900
Friends of the Library Textbook Scholarship: 900
Volunteering Midland College Scholarship: 1000

Volunteer Work

Volunteer Manager & General Labor
I-20 Wildlife Preserve & Jenna Welsh Nature Study Center
- Maintained trails and appearance of the preserve through the pruning of plants, removal of debris, mulching of trail, removal of fallen trees, and watering of plants
- Led a group of 15 volunteers to clear space for viewing area
- Responsible for opening and closing of preserve

Historical Tour Guide
George W. Bush Childhood Home
- Provided tours of the historic presidential home
- Greeted and checked in patrons

STEM camp instructor
Museum of the Southwest
- Guided children learning sessions during STEM spring break camp

Donated items sorter
Friends of the Library book store
- Identified donated items of interest such as rare vinyl records, books, magazines, textbooks (ect.)
- Used knowledge of classics, philosophy, and art history to simplify and organize shelves by year, author, and subject within genre, informed patrons about books

Narrator
Recording Library of West Texas
- Recorded audio of written content

Warehouse staff
Salvation Army
- Sorting of donated items & general warehouse work

Professional Memberships

Association Computing Machinery
ColorStack
AccessComputing

Projects

NFT Scraper | *Python, Beautiful Soup, Requests*   Sep 2023
- Web scrapper that scrapes pictures & attributes on NFT's from HTML retrieved from server

Moist Meter | *React JS & TS, Python, Google Cloud, RaspberryPI, HiveMQ, MongoDB*   Oct 2023
- Front-end developer on IoT web-app, 1st place winner in hackUTA's main track and State Farm track

State Maps | *React JS, d3-geo, MUI,*   Aug 2023
- Interactable map of the United States. When A state is clicked info about that states flag will be shown. Created in React JS, uses wikipedia's API, and material UI.

myPomodoro | *Flutter, Dart*   Aug 2023

- A Native Windows Pomodoro Timer with a built in To-do list. User Controls include Start, Stop, Skip, Adding tasks, and Removing Tasks. Built in Dart with the Flutter Framework.

ACM Challenge | *Python, pandas matplotlib, numpy, seaborn*   Jan 2023
- Report that graphs stars by different attributes and finds potential errors in dataset. Completed for ACM's 2023 coding challenge for ACM Research.

Account Aggregator | *ReactJS, JavaScript, CSS, SCSS, ReChart*
- Co-developer of financial aggregator which visualized transactions with data collected from Plaid API, allowing for overview of accounts such as Bank of America, Vanguard, American Express and 12,000+ participating institutions

Personal Website | *Bootstrap 5, Html, CSS*
- Personal website hosted at https://nathanperez.dev, created to showcase projects not related to academic work

TECHNICAL SKILLS

Languages: C, C++, Java, JavaScript, Typescript, Python, SQL (Microsoft), HTML, CSS, SCSS, Dart
Frameworks: ReactJS, Flutter, Bootstrap 5
Developer Tools: Git, Jira, Confluence, SSMS, IIS, Linux / Unix, Figma

REFERENCES

Available upon request