# Nicholas Wanner

nickrwann@gmail.com | 832.349.0727 | www.linkedin.com/in/nick-wanner

EDUCATION SKILLS

**TEXAS A&M UNIVERSITY**Languages: C/C++, Python, C#, JavaScript, CSS

BS IN COMPUTER ENGINEERING
Databases: SQL, NoSQL (e.g., PostgreSQL, MongoDB)

MINOR IN CYBER SECURITYWeb Dev:ASP.NET, Vue.js, ExpressMay 2021 | College Station, TXDevOps:Git, Docker, Kubernetes, Azure

GPA: 3.94 / 4.0 (Summa Cum Laude) Machine Learning & AI: Tensorflow, Huggingface, ONNX Runtime

Other: WSL, Databricks

# **EXPERIENCE**

## **DELL** | SOFTWARE ENGINEER, CTO SOFTWARE POC TEAM

June 2022 - Present | Austin, TX

- Spearheaded an AI/ML model optimization initiative using ONNX Runtime and advanced quantization tools, achieving significant compute performance boost for targeted hardware as well as halving model storage requirements for client-formfactor laptops.
- Designed and implemented versatile MLOps templates and platforms in Databricks, tailored for developers and data
  scientists in data-centric roles, additionally integrating advanced data/model drift detection to enhance performance and
  operational efficiency.
- Secured five patents in wireless and HID tech, including WiFi meshes and gaming router enhancements.
- Enhanced gaming experiences by minimizing latency jitter with advanced networking solutions for critical applications.
- Developed embedded code for 'NYX' wireless PC controller, improving user experience and connectivity at CES 2022.
- Developed a PoC for better workstation setups, creating an algorithm for optimal peripheral configurations.

## **DELL** | SOFTWARE ENGINEER, CTO TECH STRATEGY TEAM

June 2021 - June 2022 | Austin, TX

- Led a proof-of-concept for a Dell Bluetooth pairing solution, enhancing connectivity and redefining pairing experiences.
- Aided in creating ML-driven thermal management, improving compute efficiency by 12% and extending battery life by 15%.
- Engineered a data collection framework to streamline gathering of training data and assess system setting impacts.
- Collaborated with data scientists on defining workloads and metrics, crucial to models adapting performance to user needs.

## **DELL** | SOFTWARE ENGINEER INTERN

June 2020 - Aug 2020 | Austin, TX

- Led touchpad prototype design, significantly boosting user interaction, efficiency, and halving time to market.
- Pioneered touchpad technology leading to a patent, highlighting its innovation and intellectual value.
- Conducted research on pen-on-touchpad technology, evaluating pen types and establishing KPIs.

#### THOUGHT TRACE | DATA SCIENCE INTERN

Jan 2018 - Aug 2018 | Houston, TX

- Developed web apps for machine learning data labeling and QA, improving data accuracy and process efficiency.
- Created a comprehensive ontology for front-end UI validation, improving application reliability and user experience.
- Engaged in SCRUM meetings and collaborated with data scientists, fostering team dynamics and project success.

#### TEXAS A&M | PEER TEACHER

June 2019 – Aug 2019 | College Station, TX

- Instructed 35 students in Intro to Computer Systems
- Developed adaptive lesson plans to engage a variety of learning styles, enhancing both personal and group involvement.

# **PROJECTS**

## MULTI-INSTRUMENTAL TACTILE SYNTHESIZER (MITS) | TOOLS: ARDUINO, SWIFT, REAPER (DAW)

Gloves that convert hand gestures into musical instrument sounds, utilizing Arduino and DAW software, demonstrating gesture recognition and sound synthesis.

## **RECEIPT READER** | Tools: Node JS, HTML, CSS, Google APIs

Web app enabling users to authenticate, upload receipts, and extract data with OCR, with seamless Google Sheets integration for expense tracking and analysis.