Trevor Nichols

Contact

+1 (440) 263-5621

+60 (11) 5634-1770

teb99@pm.me

Cleveland, OH 11447

01/02/2006

github.com/tnichols217

Career Object

Detail-oriented professional with experience in software development, API endpoint design and implementation, AI training, and frontend design. Deep understanding in backend integration with Microsoft Azure, GitHub actions, and Nix CI/CD. Extensive experience in modeling, animating, and texturing 3D models for commercial purposes. Praised for creative problem-solving, meticulousness, and technical depth. Excels at the integration of computer programming and art.

Skills

7+ years

- Linux
- Docker
- Podman
- Docker Compose
- Systemd
- Excel
- Word
- Powerpoint

6 years

- Node.js
- JS/TS
- Github Actions
- Java
- Nix
- C#
- HTML
- CSS
- Python

4 years

- MD Docs
- QEMU

3 years

- .NET
- Azure
- Microsoft Server
- Ubiquiti Unifi
- Docker Swarm
- Quarto

Personal Experience

Research Contributor - Software Engineer   Sep 2024 - Ongoing

AI4EDU | Cleveland, OH, USA

github://os-computational-economics/ai4edu-api-service

- **Built REST backend services** for our AI chatbot using fastAPI
    - Integrating with multiple APIs including OpenAI, Anthropic, and Claude
    - Serves 2 research teams and 5+ classes on campus for over 100 people
    - Provides custom RAG and file access for models for individual teams and groups
- **Led the backend team** of 4 people
    - Enforced good coding practices and styles
    - Review and provide feedback on 100% of code changes
    - Led and implemented over 7 major features
- **Built and maintained databases** using PostgreSQL, DynamoDB, and Pinecone
    - Designed the database schema
    - Maintained and created database migrations
    - Maintain interfaces for various languages across the project
- **Developed workflows and CI/CD** using GitHub workflows to speed up delivery of our product
    - Sped up deployment times by over 75%
    - Created automated PR testing and checks, increasing team efficiency

Facility Assistant   Oct 2023 - Ongoing

Tinkham Veale University Center | Cleveland, OH, USA

- **Worked on small and large teams** to prepare the venue for small and large events

Audio Visual Technician

Sep 2023 - Ongoing

MediaVision | Cleveland, OH, USA

- **Maintained classroom technologies** including both audio and visual systems
- **Facilitated classroom recordings**

Open Source Contributor

Aug 2022 - Ongoing

Contributed to

- NixOS/nixpkgs 19.3k stars
- tnichols217/obsidian-columns 200+ stars, 40k+ downloads (creator)
- Vinzent03/obsidian-git 7.3k stars

Audio Visual Technician

Aug 2020 - Aug 2023

Penang Bible Church | Georgetown, Penang, Malaysia

- **Custom designed an AV system** within the restrictions of a space, needs, and budget
- **Developed preventative measures** to maintain audiovisual systems to reduce breakdowns or malfunctions by over 65%
- **Orchestrated livestreams** and live audio processing for events
- **Designed custom cables** for streamlining connections within an AV system

IT Technician / Programmer Intern

Aug 2022 - Aug 2023

Dalat International School | Tanjung Bungah, Penang, Malaysia

- **Developed backend and frontend software** for identification services including UX design in Aurelia, backend implementation in C#, .NET, Azure functions, and SQL.
- **Developed inventory management systems** for all equipment within several organization's physical and network environments
- In depth knowledge of **Unifi** network management software to manage and maintain a private network

3D Modeler

Nov 2022 - Aug 2023

Sandm. Creative Agency | Georgetown, Penang, Malaysia

- Utilized **GIMP, Inkscape, Illustrator, Photoshop**
  - **Created textures** for 3D models
  - **Generated** bump, metalness, emission maps
- Utilized **Blender**
  - **Modeled** hard surfaces including products, environments, packaging, and buildings
  - **Sculpted** detailed natural shapes whilst maintaining a low poly count
  - Utilized **physics simulations** to animate clothes, smoke, softbodies, and destruction
  - Retopologized models to be **game and animation ready**
  - Highly experienced at **generative geometry**, textures, and lighting
- Led over 50% of 3D design and modelling projects for the company

Education

Case Western Reserve University

Aug 2023 - May 2027

Masters and Bachelors of Science (M.S./B.S.) in Computer Science Candidate

Sec. Bachelors in Data Science, Computer Engineering, Electrical Engineering

Cleveland, OH, US

Senior Status, GPA 3.805

- Questbridge scholar
- University merit-based scholar
- Dean's High Honors x4

Studied in

- Artificial Intelligence
- Machine Learning
- Data Science Systems and Modelling
- Systems Programming
- Theoretical Statistics
- Hardware Logic Design
- Algorithms
- Database Systems

Participated in

- The Fraternity of Theta Chi - Scholarship Chair and Assistant Treasurer since 2024
- CWRUnix (Case Linux Club) - Current President
- The Board Meeting - Active Member

Dalat International School

Aug 2022 - Aug 2023

High School Diploma with Summa Cum Laude

Penang, Malaysia

GPA: 3.8642

Studied in

- 5: AP Computer Science A
- 5: AP Computer Science Principles
- 5: AP 3D Art and Design
- 5: AP Statistics
- 5: AP Calculus BC
- 5: AP Biology
- 5: AP Physics I
- 4: AP Music Theory