# ORNIE PAYER

in LinkedIn | 📱 929-310-3588 | 🌐 orniepayer.com | ✉ payerornie@gmail.com | GitHub

## Skills

- Python | Java | JavaScript | TypeScript | Node.js | React | Next | Vue | Redux | jQuery | Tailwind | Express | Django | Flask |
- SQL | MySQL | PostgreSQL | MongoDB | NGINX | REST API | CRUD | NumPy | TensorFlow | PyTorch |
- AWS | EC2 | Azure | GCE | Docker | Git | CI/CD | Cloud Computing | Unit Testing | OOP | Agile | Scrum | Kanban | Figma |

## Experience

**Head Undergraduate TA**  **UB Department of Computer Science**  *Buffalo, NY, USA*  **08/2024 - Present**

- Leading Computer Organization course as head teaching assistant for 250+ students and a team of teaching assistants, coordinating labs, recitations, office hours, creating and grading exams, and streamlining communication between faculty, teaching assistants, and students.
- Delivering instruction on complex topics including MIPS assembly, data paths, pipelining, cache, memory hierarchy, logic design, and System Verilog; adjusting teaching strategies based on student feedback and evolving course needs.
- Leading office hours, lab sections, and recitations for 650+ students in the Introduction to Computer Science course, delivering instruction on foundational topics including functions, control flow, data structures, and file I/O; collaborating with professors to help design and refine lab materials.
- Leading office hours and lab sections for 350+ students in the Computer Science 2 course, delivering instruction on advanced topics including unit testing, classes and objects, linked lists, trees, stacks, queues, graphs, inheritance and polymorphism; resulting in measurable improvements in student comprehension and exam scores.

**Software Engineer Intern**  **Fresumes**  *Buffalo, NY, USA*  **08/2024 - 12/2024**

- Led development of an AI-driven resume database featuring mass messaging automation and candidate sorting.
- Implemented full-stack features with TypeScript, React Native, Node.js, and MongoDB; proactively improved schemas and indexes, boosting resume search speed by 40%.
- Wrote feature documentation and coordinated with developers and project managers in weekly Agile sprints to meet release targets.
- Migrated data from MongoDB to PostgreSQL, redesigned schemas, indexes, and queries, reducing query latency by 40%.
- Simplified software architecture from 5 repositories / 12 Docker containers down to 1 repository / 4 containers, cutting onboarding time by 50% and improving CI/CD pipeline speed by 60%.
- Implemented infinite scrolling and responsive UI layouts, significantly increasing user session duration and overall engagement.

**Undergraduate Researcher**  **UB Department of Computer Science**  *Buffalo, NY, USA*  **08/2024 - 12/2024**

- Built a cross platform Electron + TypeScript app that records and visualizes 32-channel EEG and audio to study speech intent.
- Converted Figma prototypes into responsive UI with Vite and Tailwind; integrated BrainFlow API and Chart.js for real time band power and spectrogram views.
- Created data flow diagrams and developer docs; collaborating on an ONNX inference module that links brain wave patterns to speech with ~85% accuracy.

**Technical Intern**  **Back Market**  *Brooklyn, NY, USA*  **07/2022 - 08/2022**

- Built a cross-platform Electron app (TypeScript) for recording and visualizing 32-channel EEG/audio to study speech intent.
- Performed comprehensive hardware QA audits and mystery-order checks across diverse electronic devices, notably reducing device return rates.
- Built Salesforce / iAuditor dashboards to efficiently track refurbishment KPIs, streamlining quality control inspection process and enabling quicker decision-making.

## Education

**Bachelor of Science**  **University at Buffalo**  *Buffalo, NY, USA*  **08/2022 - 12/2025**

- Major in Computer Science

## Projects

- **UB Commons:** Built an interactive restaurant food web application for University at Buffalo enabling user accounts, restaurant searches, menu views, reviews, ratings, etc. (Javascript, Flask, Docker, MongoDB, REST API, CRUD, NGINX) **(12/2024)**
- **Vital Care:** Developed a remote patient monitoring platform enabling patients real-time health tracking and communication with healthcare providers. (Javascript, Python, C++, Docker, Arduino) **(11/2024)**
- **Wayfarer:** Created an indie style 2D platformer game featuring traversable terrain, immersive story, distinct biomes, unique gadgets, special collectibles, and interactive gameplay. (Python, PyGame, Figma, Agile, Kanban, Scrum) **(05/2025)**