ALICE GIOLA

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Pocatello, ID, USA

Skills

- **Soft Skills:** Communication (written & verbal) | Time Management | Problem-Solving | Team Collaboration | Adaptability | Goal-Oriented | Self-Motivated | Strong Work Ethic | Detail-Oriented | Creativity | Customer Service
- **Coding:** C# | C++ | C | Python | Java | SQL | HTML | CSS | JavaScript | JSON | Git | Front End | Back End
- **Technologies/Environment:** Falcon | JupyterLab | Visual Studio | Github | Windows | macOS | Linux | iOS | Android | Microsoft Office | Google Workspace
- **Languages: English, Italian** – *C2: Native or bilingual proficiency* | **Chinese** – *A1: Elementary proficiency (HanBan YCT3)*

Experience

ML & Spectroscopy Research Assistant — National Institutes of Health — *Pocatello, ID, USA* — **1/2025 - Present**

- Tested and evaluated deep learning model (**CNN & feedforward**) on spectroscopy dataset using **Python**, **PyTorch**, **NumPy**, **Matplotlib**.
- Implemented code additions for data normalization and preprocessing in **Python**.
- Conducted **statistical validation** to ensure **model reproducibility and accuracy**.
- Interpreted results and assessed performance against baseline models.

ML & Neural Activity Research Assistant — National Institutes of Health — *Pocatello, ID, USA* — **11/2024 - Present**

- Tested and debugged Python-based ML models for neural activity prediction, utilizing **NumPy**, **SciPy**, **TensorFlow**.
- Processed and analyzed EEG data, applying ML algorithms to identify spatiotemporal patterns in neural activity.
- Utilized **PyTorch**, **PCA**, **Sklearn**, and custom neural network architectures to analyze EEG data and optimize model accuracy.

Applied AI and ML Trainee — HoT-AML — *Pocatello, ID, USA* — **08/2024 - 12/2024**

- Trained and optimized deep learning models using **PyTorch**, improving model accuracy.
- Gained **hands-on experience with AI and ML techniques**, tailored to address real-world applications.

Capstone Project Student — Idaho State University — *Pocatello, ID, USA* — **01/2024 - 05/2024**

- Obtained the **top project award** for outstanding visualization and interactivity.
- Developed **interactive features** for **dynamic visualization** of tree operations, enhancing educational utility and making complex structures easy to grasp for future students.

Education

Bachelor of Science — Idaho State University — *Pocatello, ID, USA* — **12/2024**

- Major in **Computer Science** | **Cybersecurity Academic Certificate** | **GPA: 3.87**
- **Relevant Coursework**: Object-Oriented Programming | Advanced Algorithms | Data Structures | Compilers | Secure Operating Systems | Software Engineering | Threat Intelligence | Cybersecurity and Resilience | Secure Systems and Networks | Advanced Computational Theory | Statistical Methods | Professional and Tech Writing | Graphic Design

Projects

- Personal Portoflio Website (**HTML/CSS/Javascript**): Custom-built portfolio website with responsive design.
- B-Tree and B+Tree visualizer (**C#):** Interactive B+Trees application for understanding of their operations and efficiencies.
- Custom Space Invaders Video Game (**C#):** Custom version of Space Invaders game, with unique features and challenges.
- TSP Solver with 4-OPT (**Python):** TSP solver application with optimized Greedy algorithm using 4-Opt Local Search for efficient routing.
- Album Collection Manager (**SQL**, **Python**): Full CRUD database system for organizing albums and musical records.