

ALICE GIOLA

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Pocatello, ID, USA

Skills

- **Soft Skills:** Excellent Written and Verbal Communication | Interpersonal Skills | Customer Relation Skills | Time Management | Organizational Skills | Problem-Solving | Team Collaboration | Adaptability | Goal-Oriented | Self-Motivated | Strong Work Ethic | Detail-Oriented | Creativity Skills | Customer Relation | Strong PC Skills | Innovative Mindset
- **Coding:** C# | C++ | C | Python | Java | SQL | HTML | CSS | JavaScript | JSON | Git | Front End | Back End
- **Technologies/Environment:** Falcon | JupyterLab | 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

- Designed and implemented **CNN & feedforward** models for spectroscopy dataset analysis (.mat files) using **Python**, **PyTorch**, **NumPy**, **Matplotlib**.
- Developed a **data preprocessing pipeline** for spectroscopy analysis, improving **signal extraction** and reducing noise.
- Conducted **statistical validation** to ensure **model reproducibility and accuracy**.

ML & Neural Activity Research Assistant [National Institutes of Health](#) Pocatello, ID, USA 11/2024 - Present

- Developed 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

- [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.