

Marcos Arnold

224-321-0800 | arnoldmarcos9@gmail.com | in/marcosarnold | marcosarnold.github.io

EDUCATION

Colorado College

Colorado Springs, CO

Bachelor of Arts, Double Major in Computer Science and Sociology

May 2027

- Relevant Coursework: Data Structures and Algorithms, Applied Python, Number Theory, Racial Inequality
- Activities: Coding Club (Leader), SOMOS Latiné Affinity (Digital Designer), Sunbutter Stand-Up (Performer)

EXPERIENCE

Software Development Intern

May 2025 – Present

Colorado College

Colorado Springs, CO

- Collaborating with the Colorado College Office of Information Technology to build and deploy full-stack web applications using Django (Python) and HTMX
- Applying object-oriented design, data structures, and algorithms to build production-level tools used by campus departments, gaining hands-on experience with real users and institutional needs.

Customer Insights and Data Analysis Externship

May 2025 – Present

Extern, Beats by Dre

Remote

- Conducting data analysis and sentiment visualization using Gemini AI and Python to understand Gen Z audio preferences
- Leveraging Python, data science libraries, and natural language processing tools to perform sentiment analysis and visualize consumer feedback across multiple audio device brands

Corporate Risk Management (CRM) Intern

August 2020 – July 2023

Discover Financial Services

Riverwoods, IL

- Supported corporate security operations by conducting real-time research and risk analysis across specialized teams, applying investigative and data assessment skills in high-pressure environments
- Managed legal requests using tools like Orion and Atlas, ensuring accurate documentation and compliance with complex workflows, illustrating attention to detail and process management

PROJECTS

Cultural Clusters in Music | *Python, NetworkX, Pandas, BeautifulSoup, caching*

June 2025 – Present

- Exploring cultural evolution in music by applying the Louvain community detection algorithm to Spotify artist collaboration and genre data, revealing patterns of regional and genre-based clustering
- Building a robust data pipeline using web scraping (BeautifulSoup, Wikipedia API) and geolocation caching to map artist communities visually using Leaflet.js and NetworkX

Django AI Codebot | *Python, Django, JavaScript, HTML, CSS, OpenAI API*

June 2025

- Developed an AI chatbot web app integrating OpenAI's API for real-time coding assistance, including session management and API request handling
- Practiced backend development and API integration skills applicable to machine learning application deployment

Snake AI | *Python, Pygame, NumPy, Jupyter Notebook, matplotlib*

May 2025

- Developed an AI-powered Snake game using Python and Pygame, implementing multiple pathfinding algorithms (Greedy, Dijkstra, A*) to navigate dynamic environments with obstacles and optimize real-time decision-making

TECHNICAL SKILLS

Languages: Python (Advanced), Java (Advanced), HTML (Advanced), JavaScript (Basic), SQL (Basic)

Frameworks: Django, HTMX, Tailwind CSS, Hugging Face Transformers, PyTorch, NetworkX

Developer Tools: Git, VS Code, Jupyter Notebook, IntelliJ

Libraries: pandas, scikit-learn, transformers, requests, NumPy, Matplotlib, BeautifulSoup