

Simon Lartey

(207)-313-1037 | slarte27@colby.edu | github.com/simonlartey | linkedin.com/in/simon-lartey27

EDUCATION

Colby College

Bachelor of Science in Computer Science

Waterville, ME

08/2023 – 05/2027

TECHNICAL SKILLS

Languages: Python, Java, C/C++, JavaScript, SQL, PHP, Dart

Frameworks & Libraries: Flask, Django, React, Flutter, Bootstrap, Tailwind CSS

Databases: PostgreSQL, SQL (schema design, indexing, query optimization)

Machine Learning: PyTorch, Sentence-Transformers, Vector Embeddings, Semantic Search

Cloud & DevOps: AWS S3, Google Cloud Platform, CI/CD (GitHub Actions), REST APIs, Authentication (OAuth)

Developer Tools: Git, VS Code, IntelliJ, Postman

PROFESSIONAL EXPERIENCE

Student Web Assistant

05/2025 – 08/2025

Miller Library

Colby College, Waterville

- Maintained and updated 100+ web pages, increasing content accuracy and usability
- Audited and resolved broken links across site, reducing user errors and improving accessibility
- Optimized update workflows in collaboration with staff, accelerating content deployment turnaround

Student Office Assistant

08/2024 – Present

Center for Arts and Humanities

Colby College, Waterville

- Streamlined administrative workflows by managing schedules, digital records, and data entry with high accuracy
- Maintained digital records and scheduling systems supporting departmental operations and student services
- Facilitated communication between 20+ stakeholders across events and department operations

PROJECTS

TrueHair AI | Python, Flask, PostgreSQL, Google Gemini 2.5 Flash

01/2026 – Present

- Co-engineered an AI-powered hairstyle visualization platform serving 200+ users with secure Google OAuth authentication and personalized experiences
- Implemented an image generation pipeline using Gemini 2.5 Flash, processing user-uploaded photos to produce responsive, near real-time hairstyle previews
- Launched a stylist discovery feature connecting users to 11+ local salons, searchable by name and specialty
- Spearheaded an admin KPI dashboard tracking activation rate, retention rate, and generation trends to inform product decisions

Colby Marketplace | Python, Flask, PostgreSQL, AWS S3, PyTorch

01/2025 – Present

- Co-developed a live full-stack marketplace (mulemart.com) serving 1,000+ users with listings, order management, and a real-time messaging system supporting concurrent buyer-seller interactions
- Implemented semantic search using SentenceTransformer embeddings, enabling meaning-based item retrieval beyond keyword matching
- Engineered secure infrastructure with email verification, presigned AWS S3 URLs, and Google OAuth authentication
- Automated deployment pipeline using GitHub Actions with enforced 95% test coverage across 8 test suites, ensuring production stability for 1,000+ users with low-latency interactions

Maze Search Algorithms | Java, SQL

01/2024 – 05/2024

- Implemented DFS, BFS, and A* algorithms to solve pathfinding problems across varied maze configurations
- Engineered custom data structures (Heap, LinkedList, Stack, Queue, PriorityQueue) to optimize runtime efficiency
- Built a visualization tool to analyze algorithm performance, correctness, and scalability

Mastermind Game | Java, PostgreSQL, JDBC

01/2025 – 03/2025

- Developed a CLI Mastermind game featuring save/load state, leaderboard, and time-based scoring
- Designed a 3-table PostgreSQL schema with foreign keys and cascade deletes tracking players, sessions, and move history
- Architected 7-class modular system (Game, Board, CodeMaker, Player, View, Colors, Database) separating logic, UI, and persistence