# Matthew Abatangle

San Fransisco Bay Area, CA

 $925-596-5081 \mid matthew@abatangle.com \mid linkedin.com/in/matthew-abatangle \mid matthewabatangle.com \mid linkedin.com/in/matthew-abatangle in/matthew-abatangle in/matth$ 

#### EDUCATION

#### University of Colorado Boulder

May 2027 (Expected)

Bachelor of Science in Information Science, Minors in Computer Science & Business

GPA: 3.6

#### EXPERIENCE

# Software Engineering Intern

June 2025 – Present

University of Colorado Boulder

Boulder, CO

- Develop and maintain automated test scripts using Pytest and Selenium to validate web application functionality
- Participate in Agile sprint planning and task tracking using Jira to support iterative QA cycles
- Collaborate with developers to improve test coverage and ensure quality standards in production

## Undergraduate Research Assistant

Jan 2025 – Present

CU Information Visions Lab

Boulder, CO

- Assist in analyzing data visualizations to enhance user interaction with complex datasets
- Collaborate on interdisciplinary research projects focused on information visualization and user accessibility
- Utilize Jekyll to structure and enhance the website, improving content organization and visualization

### Vice President, INFO Buffs

Jan. 2025 – Present

University of Colorado Boulder

Boulder, CO

- Lead initiatives to connect students with opportunities in information science, data science, and UX/UI
- Organize events, workshops, and networking opportunities to foster professional growth
- Collaborate with industry professionals and faculty to expand resources for members

### Projects

#### Ski Resort Data Analysis | Jupyter, Python, RestAPI

Nov 2024 – Dec 2024

- Performed a quantitative analysis of U.S. ski resorts, leveraging data aggregation to assess key performance metrics
- Scraped and processed 1,000+ data points from CSV/HTML/XML files and Weather API
- Filtered and normalized data based on key performance metrics such as snowfall, terrain style, and visitor reviews
- Designed and implemented data visualizations using Python, leveraging Pandas for data manipulation and Seaborn for insightful graphical analysis to identify the best ski resort in the U.S.

#### **Turn-Based Board Game** | *C++*, *File I/O*, *Game Logic*

Nov 2024 – Dec 2024

- Developed an object-oriented C++ application, implementing classes and encapsulation to manage game components
- Utilized various algorithms to handle game logic, turn-based interactions, and dynamic state updates
- Implemented file parsing and data processing to read structured input from external text files
- Optimized memory management and function design to improve code efficiency and maintainability

## Data-Driven Analysis for Colorado Swim School | Miro, Microsoft Excel, Google Suite Oct 2024 - Dec 2024

- Conducted stakeholder interviews to gather qualitative insights and mapped findings using data journey and social world models
- Analyzed social media presence and external factors through data synthesis and secondary source analysis
- Identified operational challenges, proposed data-driven design principles, and provided strategic improvements
- Delivered a professional presentation with actionable insights to enhance organizational decision-making

# TECHNICAL SKILLS

Languages: Python, Java, C++, SQL, HTML/CSS, Markdown Frameworks: Microsoft Excel, Tableau, Google Suite, Jekvll

Developer Tools: GitHub, Git, Jupyter, VS Code, Jira, Chrome DevTools, Postman

Libraries: Pandas, NumPy, Matplotlib, PyTorch, Seaborn, PyTest, Selenium

Methodologies: Agile (Scrum), Test-Driven Development (TDD)

Other Skills: UI/UX Design Principles, Data Cleaning, API Testing, Data Visualization, Technical Writing Relevant Coursework: Python Programming, C++ Programming, Data Structures, Designing User Interactions,

Quantitative Reasoning, Information and Data Retrieval Systems, Fundamental Concepts in Data Science