

# NICK SWISHER

COMPUTER SCIENCE ENGINEER



View my portfolio:  
<https://swish0621.github.io/>

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LOCATION  
Colorado Springs, Colorado



LINKED IN  
Nicholas-Swisher0621

## TECHNICAL SKILLS

**LANGUAGES:** C++, Python, SQL, C, Scala, Assembly

**DATABASES:** MongoDB, SQLite, PyMongo

**FRAMEWORKS & LIBRARIES:** pandas, praw, dotenv, FastAPI, scikit-learn, requests

**DEVELOPMENT PRACTICES:** OOP, TDD, CI/CD, Unit Testing

**TOOLS:** Git, GitHub, VS Code, command line, JupyterLab, MySQL Workbench

**DATA & VISUALIZATION:** Tableau

**WEB:** HTML, CSS

## EDUCATION

2024 - 2025

### APPLIED COMPUTER SCIENCE

*University of Colorado, Boulder*

*BS Post-Baccalaureate*

*GPA: 3.8 | Expected Graduation: Dec., 2025*

*Data structures | Algorithms | Database*

*Design & Analysis | Software Development*

*Methods & Tools | Object-Oriented*

*Programming | Data Mining | Linear Algebra*

2016 - 2020

### BS KINESIOLOGY

*University of North Texas, Denton, Texas*

*Minor Psychology*

*GPA: 3.622 | Graduated: May, 2020*

*Honors: Cum Laude, Dean's List,*

*President's List*

## PROFILE

Motivated Computer Science student (3.8 GPA), in the final semester of a post-baccalaureate BS at University of Colorado Boulder, with a prior degree in Kinesiology and Psychology from the University of North Texas. Experienced in Python, SQL, C/C++, and Git/GitHub, with hands-on project work in data pipelines, algorithm development, and database design. Passionate about building real-world software solutions; seeking internship or full-time opportunities to contribute to impactful technology projects.

## PROJECT EXPERIENCE

### CONTENT-BASED RECOMMENDATION SYSTEM - SOLO DEVELOPER

#### Python, SQLite, Pandas, scikit-learn, NumPy, FastAPI (planned)

Developing a movie recommendation engine in Python to gain hands-on experience with machine learning workflows, data processing, and model evaluation for real-world applications.

- Automated dataset retrieval from KaggleHub for reproducible, up-to-date data ingestion
- Designed and implemented a SQLite database with custom CRUD operations for structured movie data
- Built a data preprocessing pipeline to clean and transform raw datasets using TF-IDF, OneHotEncoder, and MultiLabelBinarizer
- Combined feature representations to compute similarity-based movie recommendations
- Planning to integrate a FastAPI backend for serving recommendations via REST API

### VIDEO GAME SENTIMENT ANALYSIS - GROUP PROJECT

#### Python, MongoDB, PRAW (Reddit API), Requests, python-dotenv, certifi

Collaborated on developing a platform that enables gamers to track live updates and game releases while analyzing public sentiment to provide real-time insights on community reactions.

- Developed data pipelines to ingest and process information from multiple third-party APIs (Reddit, Twitch)
- Managed API authentication and keys securely for each service
- Designed and implemented MongoDB database and operational functions to store, query, and update collected data
- Collaborated in a team using weekly Agile-style meetings

## REFERENCES

Available on request.

## WORK EXPERIENCE

### FRONT END MANAGER Safeway

2024-2025

### ACCOUNT MANAGEMENT Spectrum

2023-2024

### POWER SPORTS TECHNICIAN Rocky Mountain Cycle Plaza

2021-2023