

# NICK SWISHER

COMPUTER SCIENCE ENGINEER

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



#### PHONE

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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

## 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.

## REFERENCES

Available on request.

## 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

## 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

## WORK EXPERIENCE

**FRONT END MANAGER** Safeway

2024-2025

**ACCOUNT MANAGEMENT** Spectrum

2023-2024

**POWER SPORTS TECHNICIAN** Rocky Mountain Cycle Plaza

2021-2023