

Andrew Darfoor



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Well Planned | Team Cooperative | Proactive Communicator

SUMMARY

Recent Computer Science graduate from American University with a comprehensive background in software engineering, algorithmic logic, and full-stack development. Seeking an entry-level programming position to leverage strong software development fundamentals toward a career in innovative video game design and interactive media.

COMMUNITY ENGAGEMENT

ASF, Inc., Boyds, MD | *Book Drive & Literacy Program*

MAY 2012 - PRESENT

- Organized and contributed to book drives promoting literacy among children.
- Assisted with reading programs to support early education initiatives.

Spark Matsunaga Elementary School, Germantown, MD *Clerical Support*

MAY 2012 - JUNE 2021

- Provided administrative support during Orientation Day for various grade levels.
- Assisted teaching staff with classroom organization and student engagement.

Computer Science Social Club (CSSC), American University

SEPTEMBER 2024 - DECEMBER 2025

- Collaborate with peers to troubleshoot and debug programming issues in group study sessions.
- Facilitate discussions on software engineering best practices and ethical tech considerations.

EDUCATION

Bachelors of Science - Computer Science **American University,** Washington, D.C.

AUGUST 2021 - DECEMBER 2025

Relevant Coursework:

Introduction to Computer Science I, II & III	Creative Coding
Operating Systems & Computer Systems Organization	Web Programming
Algorithms and Data Structures	Software Engineering
Database Management Systems	Introduction to Cybersecurity

Northwest High School, Germantown, MD | *HS Diploma*

JUNE 2021 Weighted GPA: 3.82

SKILLS

Programming Languages:

- Python (Expert)
- Java (Intermediate,
- C++ (Intermediate),
- JavaScript (Intermediate)
- HTML (Intermediate)

Data & Web Technologies:

- MySQL,
- Data Mining,
- Big Data Handling,
- Web Design (Basics)

Software & Tools:

- MS Office Suite (Word, Excel, PowerPoint),
- Google Drive Suite
- Adobe Photoshop,
- Adobe Illustrator,
- Scratch (Proficient)
- Robotics
- Computing
- Data Analysis
- Spanish (Limited Working Proficiency)

ACHIEVEMENTS

- **African American Parents' Council Honor Roll Certificates of Excellence** - January 2018 & December 2017
- **Academy of Finance** - Member
- Participated in the Montgomery County Public Schools **Annual Spring Instrumental Music Concert** (Viola)
- Completed noncredit courses in **Black Rocket at Montgomery College Summer Programs:**
 - 3D Game Design, Computer Science, Video Game Design, Code Creator, Digital Animation, and Robotics

PROJECTS

Activity Manager Application

- **Function:** Developed an interactive web-based task management application using HTML and JavaScript designed to facilitate personal organization and efficient time management through custom task inputs.
- **Features:** Includes functionality to assign priority levels to specific tasks and perform multi-criteria sorting based on priority, deadlines, and task categories.

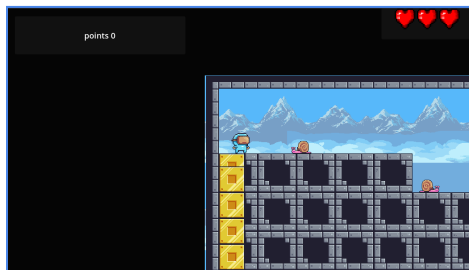
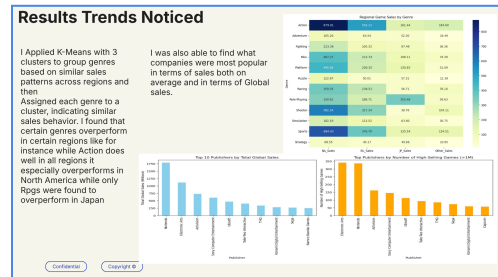


Goliath Game Demo

- **Function:** Developed a fully functional 2D platformer, featuring a four-level progression system where players navigate environments and survive enemy encounters to reach final checkpoints.
- **Features:** Engineered 2D physics and collision simulations for players and enemies, integrated original handmade sprites, and implemented specialized gravity-flipping mechanics and power-up systems

Predicting Global Product Sales (Video Games)

- **Function:** Utilized machine learning to analyze Kaggle datasets and predict global video game sales trends by identifying key market drivers.
- **Features:** Applied data preprocessing and exploratory analysis; implemented linear regression, random forest, and gradient boosting algorithms; and evaluated model accuracy using Mean Absolute Error (MAE) and R^2 metrics.

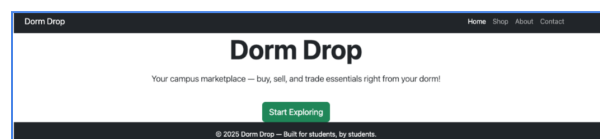


Allotaxis Game Demo

- **Function:** Engineered a fully playable, four-level educational prototype designed to teach human biology to children (ages 6 - 10) through an interactive progression system involving weapon-based area unlocking and checkpoint completion.
- **Features:** Implemented physics-based movement, multi-weapon combat, and complex enemy AI; utilized modular gameplay scripts for player control, projectiles, and melee hitboxes alongside responsive UI, dialogue boxes, and integrated audio systems.

Dorm Drop

- **Function:** Developed a secure authentication system for a collegiate marketplace using Microsoft Azure to facilitate peer-to-peer transactions within a verified student network.
- **Features:** Implemented school email verification for account validation, enabled item listing and purchasing capabilities, and managed secure interactions between authenticated users.



Portfolio

<https://www.andrewdarfoor.com>