# **Spotted**

**Team 4:** Sean Whoriskey, David Rockwell, Zachary Smith, Mike Collins, and Brianna Ayala

https://github.com/seanwho88/CSC468Project4.git

# **Chapter 1**

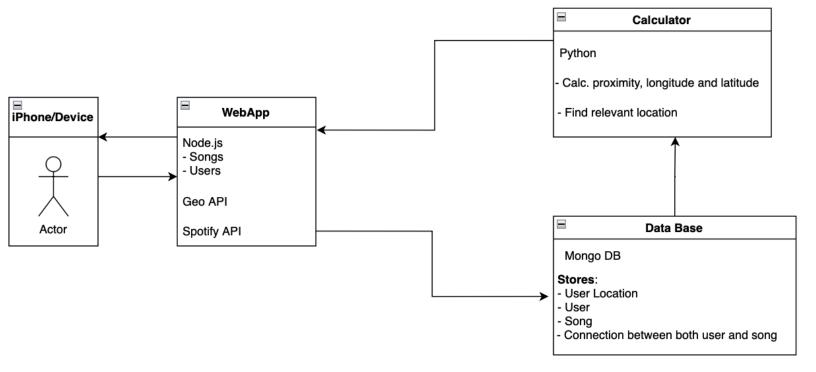
## Team Vision/Design

**Introduction:** The goal of this project is to develop and deploy a cloud-based music sharing web application that allows users to connect with others who share their musical interests. The app will utilize real-time geolocation to find other users in proximity and display the music they are currently listening to.

#### Features:

- **Connect with Spotify:** Users will connect their Spotify account to the app, which will then display their current playing song for other users to see.
- **Geolocation-based Sharing:** The app will use real-time geolocation to find other users in proximity and display their shared songs.
- Social Interaction: Users will be able to like, comment, or follow other users' shared songs, providing a way to socialize through music.
- **Music Discovery:** The app will provide a new way for users to discover new music, by browsing other users' shared songs and connecting with others who have similar musical interests.
- **User Interface:** The app will have a simple, intuitive interface, allowing users to quickly connect their Spotify account and start sharing their music.

**Conclusion:** Spotted (name in progress) is a fun and innovative way to connect with others who share your musical interests. With its real-time geolocation and social interaction features, it provides a new way to discover new music and socialize through the music you love.



# **Chapter 2**

# **Team Design Implementation**

**JavaScript and Node.js:** JavaScript will be used as the primary programming language for building the front-end user interface and the backend of the app. Node.js will be used as the runtime environment to execute JavaScript on the server-side. This will allow the app to handle multiple concurrent user requests.

**Geolocation API:** The app will use a Geolocation API to retrieve the real-time location of the user. This information will then be stored in the database so that calculation of user proximity can be calculated by the worker.

**Spotify API:** The app will use the Spotify Web API to retrieve the current playing song of the user, which will be stored and updated in the database.

**MongoDB:** MongoDB will be used as the database for storing user data, including their user location and current playing song from Spotify.

**Python:** Python will be used to implement the backend logic for handling user requests and interacting with the Spotify and Geolocation APIs. Python will also be used for any data processing tasks, such as filtering and aggregating data from the MongoDB database.

Overall, the implementation of the web application, Spotted (in progress) will use a combination of JavaScript and Node.js for the front-end and back-end, a Geolocation API for retrieving real time location and storing on the database.

# **David Rockwell**

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#### **EDUCATION**

## West Chester University | West Chester, Pennsylvania | August 2021 - May 2023 (expected)

- Bachelor of Science, Computer Science, Specialization: Cyber Security
- GPA: 3.5

## Delaware County Community College | Media, Pennsylvania | August 2019 – May 2021

#### **WORK & INTERNSHIP EXPERIENCE**

### TA Technologies | New Castle, Delaware | May 2022 – August 2022

Software Developer Intern

- Developed an automated Azure DevOps CD/CI pipeline for code generation and test tool automation.
- Created Azure Cloud virtual machines (VM) to test before deployment.
- Application deployment and automated testing using Test Complete as part of CD/CI pipeline.
- Made heavy use of PowerShell to implement Azure DevOps environment.
- Implemented SSH based password-less communication between pipeline and VMs.

#### DR Technologies | Media, Pennsylvania | September 2021 – January 2022

Software Test Engineering Intern

- Developed an IoT mesh network to monitor temperature and events for warehouse application.
- Worked on Python backend and Javascript frontend of system.
- Tested device configuration and calibration interfaces and helped debug the integrated system.
- Used virtual machines to run server code and debug Python application.
- Used developer tools through browser to debug user interface.

#### West Chester University | West Chester, Pennsylvania | January 2022 - Present

#### **VOLUNTEER & INVOLVEMENT**

#### Computer Science Club | West Chester, Pennsylvania | September 2021 – Present

- Work with other club members on computer science related projects
- Discuss different topics in the Computer Science field

### Cyber Security Club | West Chester, Pennsylvania | September 2021 – Present

- Participate in local CTF events
- Discuss news stories and emerging topics in the Cyber Security field

### First Robotics Competition | Media, Pennsylvania | September 2013 – April 2022

- Participated in robotics competitions from Middle School through High School
- During college, volunteered mentoring younger competitors

#### **TECHNICAL SKILLS**

**Languages and Applications:** Java, C++, C, Python, Javascript, HTML, VirtualBox, SceneBuilder, NetBeans, IntelliJ, Visual Studio Code, JSON serializer/deserializer, Flask server, Bootstrap, web sockets, PowerShell, Azure DevOps, Azure Cloud, Bomgar, ServiceNow, Virtual Machines, SSH

# Sean Whoriskey

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#### **EDUCATION** West Chester University West Chester, PA Bachelor of Arts in Computer Science, Minor in Computational Science Aug. 2020 - May 2023 EXPERIENCE Software Developer Intern May 2022 – August 2022 Savana Inc. Malvern, PA • Worked on DNA banking core integration project utilizing OutSystems and Postman • Completed tickets in a scrum-based work environment • Worked on platform engineering and banking services API team Jan. 2021 – Present Computer Science Tutor West Chester University West Chester, PA • Tutored computer science II and III • Tutored computer systems • CRLA certified tutor level II May 2019 - July 2019Store Team Member Sheetz inc. Morgantown, PA • Managed register while keeping customers entertained and moving swiftly • Helped manage kitchen duties and general store workflow • Increased customer satisfaction score Projects Sep 2022 – December 2022Yelp Review Data Analysis | Python, Pyspark, Jupyter Notebook, Markdown • Used Jupyter Notebook and Kaggle to conduct data analysis on Yelp reviews • Analyzed millions of users, reviews, and businesses Visualized users eating patterns and locations using a plotly heat map • Used multiple skills to sift through JSON data using RDD's Class Hierarchy Analyzer | Java, Eclipse Sep 2022 – December 2022 • Used Java meta-programming • Created a program that takes in a Java project and returns the class hierarchy • Utilized tree searching algorithms and data structures ACTIVITIES Sep 2022 – Present Esports Club Rocket League Game Lead Organized and participated in tournaments each semester (NACE and RLCS) • Scheduled practices and scrimmages against other college teams October 2022 West Chester Competitive Programming Competition • Participated in Java programming competition • Completed all three problems within 45 minutes and won \$15 in Amazon gift cards West Chester Computer Science Meet and Greet September 2022 • Participated in Java programming competition • Completed all three problems within 45 minutes and won \$15 in Amazon gift cards September 2022 West Chester Computer Science Meet and Greet • Participated in Java programming competition

#### TECHNICAL SKILLS

Languages: Java, Python, C/C++, MATLAB

Developer Tools: Git, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse

• Completed all three problems within 45 minutes and won \$15 in Amazon gift cards

**Libraries**: pandas, NumPy, Matplotlib



### **Contact Information:**

- 8 Chisel Creek Drive Landenberg, PA 19350
- Zsmi57@gmail.com
- 610-800-4473

#### Relevant Skills:

- Organized
- Collaborative Worker
- Detail Oriented
- Problem Solver
- Flexible
- Independent
- Multitasker
- Easy to work with
- Passionate

#### Certifications/Clearances:

- Projected Cyber Security Certificate
- Projected CompTIA Security + Cert
- Microsoft Applications
- DOD Government Secret Clearance (2023-Current)

#### Projected Degree:

- Honors Seminar Program
- Major Computer Science
- Minor Criminal Justice

#### LinkedIn



# **Zachary J. Smith**

#### Summary:

Currently a Junior at West Chester University striving for a major in computer science with a concentration in cyber security and a minor in criminal justice. I am an active board member and co-founder of the West Chester University Cyber Security club.

Recently I have had the opportunity to work as an intern for Children's Hospital of Pennsylvania (CHOP) as an information security intern working in a large hospital environment. This allowed me to apply my current studies to real life applications and further advanced my understanding in this field. I learned how to manage many different software programs and applications to give the proper access to CHOP employees and staff. In addition, I maintained the device workstations inside the CHOP locations to ensure that they were properly managed and secure.

This experience has been very beneficial in my goal to continue my pursuit in the cyber security industry. I continue to seek more hands-on training and knowledge to build off my education and future studies in cyber security.

#### **Education:**

West Chester University \*West Chester, PA\* (August' 20 – Current) \*Anticipated Graduation 'December' 23

- Cum GPA 3.847 / Dean's List (Every Semester) / Honors Program
- Co-Founder/Secretary Cyber Security Club

**Avon Grove High School** \* (West Grove, PA \* June' 20)

- High Honor-Roll/GPA 3.89
- President and co-founder of FBLA (Future Business Leaders of America

#### Work Experience:

Children's Hospital of Philadelphia \* (June'22-Current)

• Information Security Intern (Security Account Admin Team)

**US Soccer Certified Soccer Official/Assignor** \* (March'17 – Current)

- Referee of The Year Award EPYSA/State of Pennsylvania \* 2019
- NCAA Official \* (January'19 Current)
- Regional Referee \*(January'21-Current)
- Nationals Championship Referee \*(July '22)

PIAA Certified Wrestling Referee \*(January'21 - Current)

#### Extracurricular Experience:

West Chester University Cyber Security Club \* (January'20-Current)

West Chester University Computer Science Club \* (January'20-Current)

Avon Grove High School Wrestling Team \* (November'16 - March'20)

• Varsity Wrestler 126lbs-155lbs/Captain

**Hack-The-Box Modules** 

**NSA Codebreaker Challenges** 

# Brianna Ayala

#### **EDUCATION**

#### **West Chester University** — Bachelor of Science in Computer Science

• August 2021 – Expected May 2023, West Chester

#### **Pennsylvania State University** — Bachelor of Science in Computer Science

- August 2017 May 2021, Penn State Brandywine & Harrisburg
- Jane E. Cooper Honors Program
- Engineering Club: Worked on designing parts for a drone and telescope using SolidWorks as a team to 3d-print and assemble the pieces of these designs

#### **SKILLS**

- Operating Systems: Windows, MacOS & Linux
- Programming languages: C++, Java, Python, C, R, SQL, HTML & Matlab
- Scripting: PowerShell
- Cloud Technologies: Oracle, VMWare & Microsoft Azure

- Security tools: InsightVM, Rapid7, KnowBe4 & Bringa
- Penetration testing: Kali Linux
- Design: SolidWorks & Cura
- Frameworks: Spring Framework

#### **EXPERIENCE**

# **Qurate Retail Group, West Chester** — *Cybersecurity - PCI DSS & Vulnerability Management Intern* June 2022 – Present

- Assist with Payment Card Industry (PCI) audits
- Review Payment Card Industry (PCI) Data Security Standard Report on Compliance
- Work with the vulnerability management team to perform daily fire drill assessments for new critical vulnerabilities and patches
- Scan assets for vulnerabilities using Rapid7 & InsightVM

#### **Spring Education Group, West Chester** — *IT & Cybersecurity Intern*

January 2022 – June 2022

- Assisted with writing security policies
  Tested & implemented company-wide use of required multi-factor authentication
- Monitored the MFA help desk email
- Wrote python script to perform automated user reconciliation processes to identify inactive employee accounts

#### **Target, Phoenixville** — *Guest Service Advocate*

August 2016 - January 2022

- Provided quality customer service efficiently to ensure customer satisfaction
- Worked to solve any issues that customers may have regarding items purchased, inventory, pricing, policies, etc.
- Handling phone calls and directing to the appropriate department necessary as well as making storewide announcements when necessary

# Michael Collins

LinkedIn | ■ 336-769-7741 | Marcolls1233@gmail.com

#### Skills

- JAVA | C | HTML/CSS | JavaScript | Node.js | Express.js | MongoDB | SQL | Docker | Kubernetes | Git | Vim
- Cloud Computing | Virtualization | Containerization | OOP | OOD | Full-Stack
- Change Management | Strategic Planning | Program Management | Product Design
- Multimedia Art | Cuisine and Cooking | English, Spanish

### Projects\_

- Cloud Infrastructure: Providing assistance in a Cloud Computing research project at West Chester University. The project aims to develop a cloud infrastructure for high-performance computing systems using CI/CD pipelines (Virtualization, VMs, Containers, Kubernetes) (Spring 2023).
- The Odin Project: Built multiple small scale projects (Landing Page, Rock Paper Scissors, Etch-A-Sketch) During introductory HTML/CSS & Javascript self learning (JavaScript, HTML, CSS).
- JavaScript 30: Deployed 30 small scale JavaScript projects over 30 days as a coding challenge (JavaScript, HTML, CSS).
- Cowbell: Currently developing a web application to provide users with meal inspiration. This is a self learning/passion project with guidance from Jon Wexler's "Get Programming with Node.js" (Javascript, Node.js, MongoDB) (12/2022 - Present).

#### Education

**Bachelor of Science** GPA 3.8/4

West Chester University of **Pennsylvania** 

West Chester. PA.

08/2020 - Present

- Major in Computer Science; Minors in Spanish, Studio Arts
- Relevant Coursework: Computer Science III, Computer Systems, Discrete Mathematics, Cloud Computing, Modern Web Development
- Dean's List 2021, 2022; Computer Science Club

#### Experience\_

#### Coffee Shop Attendant

**Food Service Supervisor** 

**Kendal-Crosslands** Kennett Square, PA

04/2018 - 08/2022

08/2022 - Present

- Currently leading a team of 12 members in providing exemplary service to residents and staff.
- Evaluating staff skill and knowledge, providing consistent training and mentorship.
- Managing opening and closing sequences and providing recommendations to enhance efficiency in the workplace.
- Fostering positive attitudes, communication skills, and teamwork amongst team members.
- Reporting to weekly management meetings, providing feedback to upper management for staff needs.
- Assisting in meal operations in front and back of house.

#### Team Leader Maximo-Nivel Cusco, Peru 07/2019 - 08/2019

- Helped build and maintain a kindergarten during its mid-stage development.
- Provided guidance to teammates by communicating and translating with team management.