Computer Science
Blacksburg, VA

Raymond **Cosgrove**

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EDUCATION

Virginia Polytechnic Institute and State University (Virginia Tech)   **Class of 2022**
Bachelor of Science in Computer Science - Major GPA: 3.94/4.0   Blacksburg, VA
- **Current Coursework:** Computer Systems, Professionalism in Computing, Combinatorics, Technical Writing
- **Relevant Coursework:** Software Design and Data Structures, Data Structures and Algorithms, Computer Organization 1-2, Problem Solving in Computer Science, Programming in Python, Discrete Mathematics

EXPERIENCE

Vanguard   **Summer 2020**
Software Engineering Intern   Malvern, PA (Virtual due to COVID-19)
- Adapted, debugged, and migrated Pivotal Cloud Foundry web-services and batch applications to **AWS ECS Fargate**.
- Worked with a team to develop a **MEAN** stack web application to support Vanguard's Intramural Sports League.
- Utilized **AWS Lambda Functions** to increase web-service resiliency and optimize webservices' mean time to recovery.
- Created documentation from scratch regarding the entire web-service migration process for Vanguard to utilize during future migrations.

Kingsman Technology Solutions   **2017-2018**
Front End Web Developer   Leesburg, VA
- Developed a new employer/employee matching system for HUBZones.
- Utilized **AngularJs, Bootstrap, HTML5,** and **CSS3** to develop the front end of the single page application.
- Implemented **SLO** authentication and identity management system using **Azure Active Directory.**

Virginia Tech   **Summer 2020**
Undergraduate Teaching Assistant   Blacksburg, VA
- Tasked with grading 250+ students **Python** projects, homeworks, and assignments.
- Responsible for holding 10 hours of office hours each week to help progress students' programming proficiency.

PROJECTS

Spotifuse - spotifuse-9a937.web.app   **2020**
VTHacks VII (Hackathon)
- Built a **MEAN** stack application to create Spotify playlists for users and their friends.
- Developed an algorithm to search through the types of music users like and find music that they and their friends both might like.
- Utilized Spotify's publicly available **REST** api to authenticate users get information about their listening behavior as well as for seeded recommendations.
- Designed the single page web application using Google's **Material Design** framework for Angular.

Tetr.js - tetrjs-rtc.netlify.app
VTHacks VI (Hackathon)   **2019**
- Built a webcam-controlled Tetris game using **HTML, CSS, Javascript,** and a high-level **machine learning** library.
- Used a machine learning algorithm on a live video feed to track the position of body parts in order to detect gestures that control the tetrominos in-game.
- Won best UI/UX in Virginia Tech's 2019 Hackathon.

Portfolio Website - raymondcosgrove.com
Personal Project   **2019**
- Developed a responsive mobile-first portfolio website using **HTML, CSS, Javascript.**
- Utilized **JQuery** to manipulate the DOM and **CSS3** for animations and transitions.
- Currently implementing Google DialogFlow chat/help bot into site to improve user experience.

Recursive Backtracking Visualizer - backtracking-visualizer.netlify.app/
Personal Project   **2019**
- Built a **ReactJS** web application in order to visualize sudoku puzzles being solved using a recursive backtracking algorithm.
- Included user controls to tweak the speed of the algorithm as well as pause/play/reset functionality.
- Constructed plans to extend the application to allow custom sudoku puzzles and further explain the solving algorithm.

SKILLS

Programming: Java, Python, Javascript, TypeScript, Angular, ReactJS, C, MATLAB, Express, NodeJS, HTML5, CSS3
Design: GIMP, Angular-Material UI Framework
Tools: Git, Jira, AWS, Google Cloud Platform

AWARDS/ACHIEVEMENTS

- Microsoft Certified Professional in **HTML5, CSS3,** and **JavaScript** (Exam 70-480)
- VTHACKS VI Best User Interface/User Experience
- Virginia Tech Dean's List 2018-19 School Year