Nicholas Vallejos

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EDUCATION

Binghamton University, State University of New York   **May 2020**
Bachelor of Science in Computer Science
GPA: 3.40/4.00

TECHNICAL SKILLS

Languages: Java, C#, C++/C, JavaScript, Python
Software and OS: git, bash, Linux, Windows 10, Visual Studio 2019, .NET, Unity3D, Eclipse, Android Studio
Additional: basic SQL, basic HTML/CSS, basic NodeJS, basic ReactJS, TCP/IP familiarity, UDP familiarity, Apache Ant, basic XML, JSON familiarity, basic Microsoft SQL Server 2014

PROJECT EXPERIENCE

Amazon Clone, React | Mamaroneck, NY   **December 2020**
  - Programmed an Amazon website clone utilizing React function components and vanilla CSS for styling
  - Deployed application on Firebase and used Firebase for login authentication
  - Used React context to broadcast product data to multiple components
  - Utilized git for source control and pushed to public github repository

Unity2D Android Mobile Game, C# Programmer | Mamaroneck, NY   **May-June 2020**
  - Developed a mobile game using the Unity2D game engine where the objective of the game is to jump over an endless wave of obstacles to accumulate as many points as possible
  - Programmed a collision detection system that uses invisible rays to determine the distance between the player and the environment
  - Designed and implemented an obstacle spawn algorithm that will generate an obstacle every 'x' seconds where 'x' is equal to a random value between 0.25 and 1
  - Utilized git for version control and Trello for project management
  - Published the game to the Google Play Store and received 16 downloads from users in the US and 3 other countries

Map Container, C++ Programmer | Binghamton, NY   **April 2019**
  - Recreated the std map container in 700 lines of code using template metaprogramming technique which allows the user to define a map of any type
  - Utilized Valgrind to track and resolve memory leaks
  - Programmed a skip-list data structure allowing for $O(\log(n))$ insertion time and search time
  - Implemented Iterator, ReverseIterator, and ConstIterator sub-classes for map traversal
  - Pushed source code to Github repository

Random Music Generator, Android App, Java Co-Programmer | Binghamton, NY   **February 2019**
  - Designed and implemented an android application that generates short music tracks with randomly generated notes using a custom music generation algorithm for a 1-day hackathon event
  - Designed a simple UI through Android Studio that allows the user to easily customize the music generation algorithm
  - Utilized Trello to visualize the projects goals and split up work amongst a 3-person team of programmers
  - Used Git for source control
  - Published app to the Google Play Store

PROFESSIONAL EXPERIENCE

IT Intern, Westchester County Government | White Plains, NY   **June-August 2018**
  - Organized server logs in Excel documents to facilitate server maintenance
  - Learned Java codebase and Microsoft SQL Server 2014 with the help of another software engineer
  - Wrote Java and JSP code in Eclipse IDE that generates and displays a table of all users that have accessed a server
  - Utilized SVN plugin for source control

Employment

Camp Counselor, Village of Mamaroneck Day Camp | Mamaroneck, NY   **Summer 2014-2016**
  - Responsible for overseeing and engaging with groups of over 25 campers ranging from 1st to 4th grade
  - Participated in outdoor activities and led icebreakers
  - Communicated effectively with co-counselors and supervisors