Benjamin Salzberg

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3503 Overbrook Road, Pikesville MD, 21208

Education

University of Maryland College Park, College Park Maryland

May 2021

Selected for Scholars Program: Science and Global Change

Bachelor of Science in Computer Science

Minor in Mathematics

Specialization in Cybersecurity

GPA: 3.08

Skills

Coding and Scripting Skills:

Java, JavaScript, C, Python, X86-64 Assembly, C++, HTML5, CSS, Racket, Ruby, C#, Rust, OCAML, R, AVR Assembly, SQL, LaTeX.

Tools:

GNU/Linux, Windows, Google Firebase, Git, Wireshark, NodeJS, Microsoft Access, Microsoft Excel, MongoDB, Redcap, GitHub, VirtualBox, DNS, TCP/IP, UDP, WebRTC, .NET Entity Framework.

Experience

InVita Healthcare

July 2022-Present

- Developed new tooling and performed bug fixing for a Transact-SQL C# MVC application designed to track sexual assault evidence kits for victims. Refactored code to ensure ease of access and expandability of development tools.
- Authored documentation on various topics to ensure ease of access for future updates and development in accordance with established standards.
- Created SQL scripts to address data entry errors and client-reported bugs, resulting in the correction of stored data.

Ouluxx Inc.

Software Developer

May 2020-June 2021

- Conceptualized and deployed a chat client using WebRTC and Google Firebase, enabling users and clients to connect and communicate.
- Within 4 months, developed a server and database for an online marketplace, allowing stores to easily connect with users.
- Implemented secure online payment and account management options for a storefront serving producers and distributors.

Research Program at Johns Hopkins

IT Manager

Summers 2018, 2019

- Removed the need for manual review of patient surveys by creating a tool to automatically parse the data.
- Created a tool to streamline the process of determining patient eligibility for studies.
- Improved the ability of nurses and physicians' assistants to record patient treatment data using MS Access by simplifying and streamlining input forms.
- Conducted research on the effectiveness of medications in an outpatient clinic.



Harbor Labs Baltimore, Maryland Assistant Developer

March – April 2017

- Developed a peer-to-peer system applying the WebRTC API for secure transmission between different clients.
- Expanded upon a cryptography peer-to-peer client using the Stanford JavaScript library utilizing AES and public private key encryption methods.

Volunteering Experience

The Africa in Me Software Developer

June 2021-Present

- Developed a search system for projects, volunteers, and donations for the non-profit organization.
- Created a tool to export data from a C# MVC .NET Entity Framework application connected to a SQL database as either a CSV or Excel spreadsheet.
- Designed and implemented a system that reminds users to record volunteer hours, sending reminders if forms are incomplete.
- Awarded "Volunteer of the Month" in December 2021.

Projects and Coding Experience

- Competed in Nahamcon 2021 capture the flag competition, placing 492/6491 players.
- Competed in Lockheed Martin's 2021 capture the flag competition.
- Established a website for the GRNDaD registry, a multi-site project that performs research on sickle cell disease, using Google Firebase.
- Participated in the JHacks 2019 and 2020 hackathons, developing a JavaScript tool to assist those with reading disabilities and a web-assembly tool to help users with coding challenges.
- Created a Python tool using TKinter to assist special needs students in learning the alphabet.
- Produced DNS resolver in Python capable of performing basic name resolution.
- Built a Python chat server using sockets to retrieve and send messages.
- Assembled a Deterministic Finite Automata, and a Non-Deterministic Finite Automata parser and interpreter in OCAML to parse regex grammars.
- Deployed a Twitter Tweet Analyzer using Hadoop and Java.

Relevant College Courses

Machine Learning	Abstract Algebra
Introduction to Compilers	Applied Harmonic Analysis
Applications of Linear Algebra	Bioinformatics Algorithms

