Antonio Balanzategui

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Objective

I am a third year Computer Science student attending Virginia Tech. I want to use my skills and degree to make an impact on the real world, while making connections with those in the industry with similar intentions as mine.

Education

Bachelor of Science, Computer Science | Major GPA: 3.60 | Cumulative GPA: 3.23
Expected Graduation: May 2025

Virginia Tech - Blacksburg, Virginia

Courses: Data Structures & Algorithms, Java OOP, Intro to Problem Solving, Intro to Computer Organization, Introduction to GUI Programming

Skills/Awards

Programming: Java, Javascript, Python, SQL, C, R/RStudio
Web & Database: HTML, CSS, MySQL, React, Express, Mongoose, MongoDB
Technologies: Git, Docker, Postman, Solidworks(3D Modeling), JavaFX/SceneBuilder, Excel, Eclipse, Microsoft Suite
Other: Spanish(Proficient), Marvin L. and Leila W. Pollard Scholarship

Projects

Influencer Statistics Display

- Led team of 3, assisted teammates in debugging, delegated tasks, resulted in a final grade of 100%
- Implemented back-end functionality and class structure, utilizing knowledge of **object-oriented** programming.
- Implemented an interactive display to show sorted influencers based on their statistics for a certain month

Password Security Measurement

- Read a list of words from a text file, to create a dictionary.
- Allowed for user input of up to three combinations of words within the dictionary
- Hashed user inputs using **SHA256** and **SHA512** hash functions
- Utilizing **recursion** and **combinatorics**, efficiently checked combinations of words until the user input was found.
- Implemented interactive display to show the time it took to crack passwords, graphically displayed to the user.

Google Programming Statistics

- Created a **API** using **Mongoose** and **Express** to fetch data from a **MongoDB Database**
- Data was then used to create responsive graphs using **React** and the **JavaScript** library **D3**
- Rendered a **MUI** DataGrid component, which allows for users to select particular data points
- Highlighted data is then displayed on the graph for the user, using **React**

Visual Novel API

- Utilized python to **Web Scrape** and use **APIs** to gather information of visual novel series: “Umineko When They Cry”
- Developed a **API** using **Express** to fetch data from a **MySQL** database, containing information of the series
- Created a query validation system and query handling process that allows for the quick creation of **Middleware** functions
- Provides in depth error messages to the user dependent on each **routes’** query schema

Clubs and Organizations

Galileo/Hypatia Living Learning Community (Virginia Tech) (2021 – 2022)

- Engaged in community service, networking activities with other engineering students, and upheld professionalism.

Society of Hispanic Professional Engineers (Virginia Tech) (2022 – Present)

- Actively involved within the community of underrepresented groups of engineers on campus
- Assisted in guiding discourse towards professionalism and the promotion of racial equity on campus.