Alex Gomez

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Skills

Programming: Python, C/C++, C#, JavaScript, Flutter/Dart, Node.JS, React.JS, Express.JS, Bash/UNIX, HTML/CSS, GIT
Systems Engineering: CAMEO, Simulink, DOORS
Tools: Visual Studio, Visual Studio Code, Mongo Compass, Docker Desktop, Azure DevOps, Android Studio, Postman
Language: English, Spanish (Fluent), French (Beginner)

Projects

RestaurantRandomizer github.com/gomeii/RestaurantRandomizer

- Built custom **geolocation-based search** and rendered real-time map markers with responsive UI updates.
- Developed an interactive **restaurant selection mechanism** with a randomized wheel animation, enhancing user engagement

MoviePicker github.com/gomeii/MoviePicker

- Engineered RESTful APIs to handle **movie search, user authentication**, and **CRUD operations** on saved content
- Integrated **OMDb API** to retrieve and display structured movie and TV show metadata.
- Built reusable **React** components for dynamic search and user profile views; configured Docker containers for local development and deployment.

Education

Texas A&M University – BS in Aerospace Engineering, Minor in Computer Science **May 2023**

Experience

Software Test Engineer, Bell Textron – Hurst, TX **June 2024 – Present**

- Designed and maintained automated testing pipelines in Azure DevOps to support CI workflows across Linux, RTOS, and avionics test benches, enabling staged validation from simulation to Hardware-In-The-Loop testing.
- Developed and versioned C# libraries for the Bell Avionics High Level Testing Framework, published as NuGet packages from build pipelines in ADO to Artifactory for consistent and reusable test integration.
- Automated the full test lifecycle—from requirement-linked test cases to result reporting—with integrated metrics dashboards for traceability and continuous improvement.

Product Cybersecurity Engineer, Bell Textron – Hurst, TX **July 2023 – June 2024**

- Decomposed high-level cybersecurity requirements into detailed system, subsystem, and component specifications for Bell's FLRAA program to ensure end-to-end security coverage.
- Modeled digital identity and data sanitization services in **SysML**, translating stakeholder needs into technically precise and traceable specifications.
- Ensured alignment with **NIST cybersecurity standards**, supporting secure system design from architecture through implementation.
- Delivered technical presentations directly to customers in response to Requests for Action (RFA), clarifying design decisions and requirement traceability for cybersecurity services.

Early Experience

Aerospace Engineering Intern, Textron Systems – Cockeysville, MD **May 2022 – Aug 2022**

- Developed flight test analysis tools using MATLAB, JavaScript, and HTML, reducing subscale testing workflow time by 25%.
- Supported autopilot integration for unmanned aerial systems, contributing to embedded systems reliability.

Propulsion Engineering Intern, Textron Aviation - Wichita, KS **May 2021 – Aug 2021**

- Investigated fuel system defects using flight data and updated CATIA V6 models to support tolerance fixes and drawing revisions
- Contributed to propulsion sustainment, collaborating on engineering updates for upcoming aircraft releases.