Alessandro Baldassarre

Phone: 403-760-4930 | **Email**: aleabalda.work@gmail.com | **LinkedIn**: aleabalda | **GitHub**: aleabalda

SKILLS

- JavaScript, TypeScript, HTML, CSS, React.js, Python, Java, JUnit, SQL, C++, C, Terraform, AWS (S3, Lambda, DynamoDB), Git, GitHub

EDUCATION

University of Calgary || Calgary, AB, Canada   September 2021 – June 2025
B.S., Software Engineering || GPA: 3.2

> **Relevant Coursework**: Data Structures and Algorithms, Full-Stack Web Development, Applied Operating Systems, Object-Oriented Programming, System Design, Database Management, Software Testing, DevOps, Software Architecture, Computer Networking

PROJECTS

Beyond, Sky Catalog || *Software Architecture Course*   January 2024 – March 2024
Tools Used: *TypeScript, React.js, CSS, Terraform, AWS, Netlify, Git*

- Spearheaded the front-end design and development of a sky catalog web app created to showcase and provide information on over 500+ sky objects obtained from an API such as stars and galaxies.
- Used Typescript along with React.js to build the front-end of the application with vanilla CSS. The back-end consisted of Terraform and Lambda functions along with a DynamoDB database to store all our data. GitHub Actions was used for CI/CD for tools such as linters and facilitated deployments using Netlify.
- This project further enhanced my front-end skills and design as well as my understanding and application of back-end tools such as Terraform, AWS tools, and Python Lambda functions.

Flight Reservation Application || *System Design Course*   October 2023 – November 2023
Tools Used: *Java, MySQL*

- Developed an application that allows users to log on as various roles, such as admins or passengers, and perform actions such as booking a flight.
- Built the entire application in Java with a group of 4. Leveraged multiple design patterns such as MVVC and Singleton to adhere to best practices for writing clean, modular, scalable code. Used a MySQL database to store information such as user info and flight info.
- Using Java GUI proved challenging; however, this was easily overcome by reading documentation and utilizing other external resources to boost my understanding.

Obituary Generator || *Full-Stack Web Development Course*   May 2023 –April 2023
Tools Used: *JavaScript, React.js, CSS, Terraform, AWS, Netlify, Git*

- Developed a full-stack web app that generates obituaries for individuals (fictional or non-fictional)
- Leveraged the OpenAI API to generate the text for the obituary, Amazon Polly for Text-to-speech, and Cloudinary to store the speech and picture of the deceased.
- This project introduced me to full stack applications, specifically API's, AWS tools and services like S3 and DynamoDB, and form handling.

Data Management Project || *Data Management Course*   November 2022 – December 2022
Tools Used: *Python, MySQL*

- Developed a program that allowed users to manipulate and view data from a SQL file with various queries.
- Worked in a group of 4, using Git and GitHub for version control. Connected to our database via the python connector and created various functions each with different SQL queries adhering to the Single Responsibility Principle. Graphing and plotting were also implemented through matplotlib and NumPy.
- Introduced me to user authentication and user authorization as well as managing large quantities of data and code using Python, Git, and MySQL.