

SARA BALTZ

FULL-STACK SOFTWARE ENGINEER

sara@sarabaltz.com | (765) 505-6148 | Dallas, TX (Open to Relocation)

I am a driven clinical researcher with a proven aptitude for teamwork & problem solving now transitioning to software development and eager to leverage my detail-oriented mindset & passion for continuous learning to build robust & user-friendly applications, contribute to innovative teams, and deliver high-quality, impactful software solutions that enhance user experiences.

TECHNICAL SKILLS JavaScript (Node.js, Express, Redux, Sequelize) · Python (Flask, Alembic, SQLAlchemy) · React · HTML/CSS · SQL (PostgreSQL, SQLite3) · TypeScript · Tailwind CSS · Postman · AWS S3 · Beautiful Soup · Docker · Debugging

RELEVANT SKILLS Writing & Documentation · Teamwork · Problem Solving · Graphic Design (Inkscape, GIMP, PaintTool SAI)

EDUCATION

APP ACADEMY Software Engineering Track: Full-Time

Online | March 2025

1,000+-hour full-stack web development & computer science intensive bootcamp

THE UNIVERSITY OF NORTH TEXAS HEALTH SCIENCE CENTER Clinical Research Management, M.S.

Fort Worth, TX | May 2023

THE UNIVERSITY OF TEXAS AT DALLAS Neuroscience, B.S.

Richardson, TX | May 2020

PROJECTS

ARKBITES React · HTML/CSS | Python · Flask · SQLAlchemy · Alembic · BS4 | PostgreSQL · SQLite3 [GitHub](#) | [Live Website](#)

- Developed a full-stack website with tools for players of the mobile game Arknights that seamlessly integrates a React, HTML, and CSS frontend with a Python & Flask backend for a responsive & dynamic user experience
- Automated the acquisition of character & material icons by scraping the Arknights Terra wiki with Beautiful Soup, parsing HTML to retrieve icon URLs & subsequently processing & integrating the data into the project's database
- Engineered robust backend API endpoints using Python, Flask, SQLAlchemy, Alembic, and PostgreSQL/SQLite3 to create & manage user accounts, characters, materials, teams, and favorites, ensuring data integrity & efficient querying
- Designed & implemented a relational database schema using PostgreSQL & SQLite3, leveraging the SQLAlchemy ORM to efficiently manage data relationships & optimize query performance for core features

MUSEIC React · HTML/CSS | Python · Flask · SQLAlchemy · Alembic · AWS S3 | PostgreSQL · SQLite3 [GitHub](#) | [Live Website](#)

- With a group of 3 other students, developed a full-stack Spotify clone that seamlessly integrates a React, HTML, and CSS frontend with a Python & Flask backend for a responsive & dynamic user experience
- Developed a dynamic music player using React Player that utilizes React's state functionality to manage playback progress, progress through a song queue, and playback volume, enabling seamless navigation within & between songs
- Engineered robust backend API endpoints using Python, Flask, SQLAlchemy, Alembic, and PostgreSQL/SQLite3 to create & manage user accounts, songs, albums, playlists, and favorites, ensuring data integrity & efficient querying
- Designed & implemented a relational database schema using PostgreSQL & SQLite3, leveraging the SQLAlchemy ORM to efficiently manage data relationships & optimize query performance for core features

RYOKANVAS React · Redux · HTML/CSS | Node.js · Express · Sequelize | PostgreSQL · SQLite3 [GitHub](#) | [Live Website](#)

- Developed a full-stack AirBnB clone that seamlessly integrates a React, Redux, HTML, and CSS frontend with a Node.js & Express backend for a responsive & dynamic user experience
- Engineered robust backend API endpoints using Node.js, Express, Sequelize, and PostgreSQL/SQLite3 to create & manage user accounts, property listings, and reviews, ensuring data integrity & efficient querying
- Enhanced application security with client- & server-side validation, user authentication & authorization, middleware to protect against common web vulnerabilities (Helmet & Csrf), and password hashing (BCrypt)
- Designed & implemented a relational database schema using PostgreSQL & SQLite3, leveraging the Sequelize ORM to efficiently manage data relationships & optimize query performance for core features

SARABALTZ.COM Tailwind CSS | TypeScript

[GitHub](#) | [Live Website](#)

PUBLICATIONS

PHYSIOLOGICAL AND PERCEPTUAL DEMAND OF OVERGROUND ROBOTIC EXOSKELETON GAIT TRAINING ON PHYSICAL THERAPISTS IN THE INPATIENT NEUROREHABILITATION SETTING | Co-Author

October 2024

Awards: American Congress of Rehabilitation Medicine Poster Spotlight 1st Place Award, Best Early Career Poster in Technology

METABOLIC INTENSITY OF OVERGROUND ROBOTIC EXOSKELETON GAIT TRAINING AMONG PATIENTS WITH SUBACUTE SPINAL CORD INJURY | Co-Author

October 2024

Awards: Spinal Cord Injury Interdisciplinary Special Interest Group Early Career Poster Award

EMPLOYMENT

CLINICAL RESEARCH COORDINATOR 1 Baylor Scott & White Institute for Rehabilitation

February 2023 – September 2024

- Coordinated the Sleep SMART, ERA Stroke, FIRST, DOOR, and SCIMS Spasticity Module investigator-initiated clinical trials
- Maintained departmental databases (stroke admissions; publications & dissemination; CVs, licenses, and certifications)