SARA BALTZ

FULL-STACK SOFTWARE ENGINEER

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

I am a former clinical researcher now transitioning to software engineering with a proven aptitude for teamwork & problem solving. I am eager to leverage my driven, 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 & Csurf), 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   *October 2024*
ON PHYSICAL THERAPISTS IN THE INPATIENT NEUROREHABILITATION SETTING | *Co-Author*
  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   *October 2024*
WITH SUBACUTE SPINAL CORD INJURY | *Co-Author*
  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)