SARA BALTZ

FULL-STACK SOFTWARE ENGINEER

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I am a software engineer & former clinical researcher 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 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)