IZAK BUNDA

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EDUCATION

University of California, Los Angeles (UCLA)   **Los Angeles, California**
Bachelor of Science, Computer Science   *Expected June 2025*
- Relevant Coursework: Operating Systems, Software Construction, Computer Organization, Data Structures and Algorithms, Programming Languages, Artificial Intelligence, Computer Networking, Logic Design, Probability, Linear Algebra, Differential Equations, and Discrete Structures.
- Clubs: Institute of Electrical and Electronics Engineers (IEEE), Association of Computing Machinery (ACM), Pilipinos in Engineering and Stem (PIES), UCLA Creative Labs, DevX, and Campus Events Commission (CEC).

EXPERIENCE

Hunter Industries   **San Marcos, California**
Software Development Intern   *June 2023 - September 2023*
- Spearheaded development of "Irrigation My Design," an MVP for an interactive sprinkler system mapping tool, anticipated to serve 15,000 users and projected to add a value of $80 million to company.
- Utilized a diverse tech stack, including but not limited to JavaScript, HTML, CSS, React, and Fabric.js.
- Integrated APIs, notably Google Maps and Google Earth, to enhance tool functionality with data import and imagery features.
- Engaged in agile software development processes, embracing the Scrum framework, techniques, iterative software design, and Test-Driven Development (TDD) methodologies.

UCLA Creative Labs   **Los Angeles, California**
Front End Development Lead for Fanspace App   *January 2023 - April 2023*
- Lead front end developers to construct 12+ app screens and components (QuizScreen, SignUpScreen, HomeScreen, and more)
- Leveraged the Ticketmaster API with a custom-built algorithm to intelligently populate recommendations in under 3 seconds per query.
- Integrated the Spotify API with an algorithm which intelligently recommend events and suggest other users to connect with.

Hussle, Inc   **Los Angeles, California**
Front End Development Intern for Hussle App   *June 2022 - December 2022*
- Developed responsive page layouts on the Hussle app using React Native, Animated, Navigation, and other frontend libraries.
- Optimized frontend codebase by creating reusable UI components and 10+ screens (Explore, Profile, and Referral screens).
- Published in iOS App Store in Spring 2022 and deployed on Heroku for development and production environments.

PROJECTS

Social Media Website - MERN Full Stack Web Application   **Los Angeles, California**
Full-Stack Developer   *May 2024*
- Developed a full-stack social media application using the MERN stack (MongoDB, Express.js, React, Node.js) with a focus on scalability and performance, featuring file uploads, posting, friends, likes, and a feed.
- Implemented user authentication and authorization with JSON Web Tokens (JWT) and persistent local storage using Redux Toolkit, ensuring secure and seamless user access and data protection.
- Designed and developed a RESTful API with Node.js and Express.js to handle client requests and perform CRUD operations on a MongoDB database, enabling efficient data management and server communication.
- Created a responsive and dynamic user interface using React, HTML, and CSS, incorporating React Router for navigation, state management with Redux, a robust light/dark mode option, and a mobile browser version.

PIGZJ - Parallel Implementation of GZIP using Java   **Los Angeles, California**
Developer   *February 2024*
- Developed a multithreaded gzip compression filter in Java to parallelize compression tasks and enhance performance on multiprocessor servers, inspired by the pigz program.
- Implemented efficient data compression by partitioning input streams into fixed-size blocks, utilizing a sliding dictionary for improved compression, and coordinating multiple threads to handle dynamic data streams in real-time.
- Achieved significant performance gains over traditional gzip by leveraging Java's concurrency libraries and optimizing for various hardware architectures, including x86-64, ARM, and RISC-V-based systems.

ReUCLA - React Native Mobile Application   **Los Angeles, California**
Full-Stack Developer   *April 2023*
- Guided a team of 5 developers to create over 10 pages, utilizing custom components in React Native and other open source libraries.
- Utilized Node.js with Firebase to establish the app's backend infrastructure, enabling secure data storage, instant CRUD updates, and streamlined user authorization and authentication.
- Designed an efficient search algorithm to ensure a fast and precise discovery of listings and usernames.

ADDITIONAL

- Skills: C/C++, TypeScript, JavaScript, Python, Java, React, React Native, Node.js, Django, MongoDB, Express.js, Next.js, Redux, HTML, CSS, Git, Swift, SwiftUI, WebGL, OpenGL, OCaml, Prolog, Scheme, Figma, Microsoft Office Suite, Adobe Creative Suite.
- Interests: Software Development, Machine Learning, Artificial Intelligence, Natural Language Processing, Data Science.