Bernico Jansen Chandra

Software Engineer

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SUMMARY

UCSD Computer Science senior with a 3.967 GPA with experience in Full Stack Development and Distributed System. Passionate in building scalable and fault-tolerant software using technologies like Go, gRPC, and AWS. Proven track record from internships and projects. A self-driven problem solver passionate about applying software engineering, creative thinking, and adaptability to new technologies to solve real-world challenges.

EDUCATION

University of California - San Diego (UCSD)

SEPTEMBER 2022 - JUNE 2026 (EXPECTED)

- Bachelor of Science in Computer Science; GPA: 3.967 (Units finished: 126.00).
- Revelle College Provost Honor: 2022-25
- Relevant Courseworks: Systems Networking, Operating System, Advanced Data Structures, Design and Analysis of Algorithms, Software Engineering
- Expected to graduate in June 2026, and available to work around the same time.

EXPERIENCE

KPMG – IT Enabled Transformation Intern

JAKARTA, INDONESIA; JUNE 2024 - AUGUST 2024

- Assisted in a client-facing project as a business analyst using Salesforce: clearly communicating planned Figma requirements onto developers.
- Worked in a team to debug ServiceNow pipelines projects using JavaScript: successfully debugging a bug that hadn't been solved since the start of the project.
- Worked in a team to carefully manage databases in SAP.
- Their contact: kpmg.com/socialmedia

Kreatif Global – Software Engineer Intern

JAKARTA, INDONESIA; JULY 2023 - SEPTEMBER 2023

- Prototyped an OCR project utilizing Tesseract and the Python library PyTesseract that allows effectively cutting all of the time needed to manually read invoices.
- Contributed in debugging a MariaDB database bug.
- Their contact: kreatifglobal.co.id

PROJECTS

AloAuto – Go-React Native Mobile App Startup (WIP)

- Full stack distributed system development of gRPC backend microservices and web servers along with the React Native frontend that connects local workshops and vehicle owners in need of services.
- Consistent storages of user and workshop profiles with address geocoding supported by Google Maps to allow accurate searching of nearby workshops.
- Rich, consistent, and secure ordering and workshop scheduling system for ease of use by both sides.
- Pub/Sub system across the microservices using Redis and WebSocket to have concurrent notification system.
- https://github.com/BernicoJC/AloAuto (please Email me for access)

TritonTube – Go, gRPC, Consistent Hashing, AWS

- HTTP web server using Go that allows uploading and viewing of videos, stored in MPEG-DASH format, detached from the backend servers so the latter can be improved independently.
- Scalable content storage with consistent hashing to allow multiple load-balanced storage servers.
- Fault-tolerant metadata storage that uses RAFT system of multiple servers deployed in AWS.
- https://github.com/BernicoJC/tritontube-cse124 (please Email me for access)

Portfolio Website – ReactJS, Flask, SQLite

- ReactJS frontend, and Flask and SQLite backend website deployed through Heroku where I display my finished projects and notable assignments.
- Easy-to-update backend storage to frontend display system for projects and resume.
- Feedback feature with reCAPTCHA.
- github.com/BernicoJC/Portfolio-Frontend and github.com/BernicoJC/Portfolio-Backend

SKILLS

General Software Skills: Algorithms, Data Structures, Linux, AWS and GCP, Redis, Bash, Copilot AI, Pandas, Operating System

Backend Development: Networked Services: gRPC with Go, IP aggregation, CURL and HTTP Protocol, Horizontal Scaling, RAFT

Full-Stack Web Development: ReactJS / React Native, Flask / Golang Backend, Team Leadership; CI/CD pipeline; Agile; Scalable and Fault Tolerant Distributed Systems Design, RESTful API and HTTP Server, Pub/Sub System; Unit Testing

Programming Languages: Python, Java, C, ARM, C++, C#, JavaScript, Go, PostgreSQL, SQLite

Machine Learning: NumPy, PyTorch, Recommender System, Probabilistic Model