Kean De La Serna

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Education

Deped

University of Bohol

Aug 2021 - June 2025

Bachelor of Science in Computer Science

• Dean's List | **GPA**: 1.3 / 5.0

Tagbilaran, Philippines

Work Experience

Fullstack Developer Intern

Jul 2024 - Sep 2024

 $Tagbilaran,\ Philippines$

- Engineered 1,200+ teacher records with RESTful APIs using TypeScript, Express.js, and Prisma Accelerate, enhancing backend performance with indexing, caching, and Data Proxy, boosting query speed by 30%.
- Built responsive teacher records dashboard using Next.js, TypeScript, TailwindCSS, TanStack Query and Edge Functions, cutting data load time by 40% for 15+ users in the department.
- Produced a scalable **Turborepo-based** application, packaged with **Docker** and hosted on **AWS EC2**, enabling collaboration among **6**+ interns.

Fullstack Developer Trainee

Jan 2023 – Apr 2023

Village 88, Inc.

La Union, Philippines

- Architected custom MVC framework on Express.js with Redis sessions and multi-database support (MySQL, PostgreSQL, MongoDB), showcasing advanced backend engineering across 4+ stacks.
- Configured Docker CI/CD pipeline with GitHub Actions and Jenkins, streamlining Express.js deployments
 and boosting development workflow efficiency by 40%.
- Delivered real-time shape drawing app using Node.js, Express.js, Socket.io for multi-user collaboration, achieving perfect exam score in 4-hour build challenge.

Projects

 $\textbf{Instafix} \mid \textit{Website} \mid \textit{Source Code} \qquad \qquad \textbf{Typescript} \mid \textbf{Next.js} \mid \textbf{PostgreSQL} \mid \textbf{Huggingface} \mid \textbf{Redis} \mid \textbf{Docker}$

- Developed a freelancer matchmaking platform using **Hugging Face's GIT-base model** trained on **10m+image-text pairs**, enabling accurate object-based service matching with **92.9%** recognition accuracy.
- Containerized app with **Docker** and deployed on **Railway**, real-time messaging using **Redis PubSub** for efficient communication, and image storage for 100+ users with **Cloudflare R2**.
- Implemented infinite scroll with TanStack Query and Prisma Accelerate on Edge Functions, reducing load times by 65% and API requests by 40%, increasing user engagement 2x.

Chess Royal | Website | Source Code

Typescript | Next.js | PostgreSQL | Redis | Docker

- Created a real-time multiplayer chess game using **TypeScript**, **Next.js**, **WebSockets**, and leveraging **Turborepo** for a 40% faster development workflow.
- Integrated Redis PubSub and BullMQ for real-time queues, orchestrated with Docker, and deployed via AWS EC2, cutting matchmaking wait times from 45 to 15 seconds on average.
- Utilized PostgreSQL with Prisma Accelerate and a lightweight CSS UI, reducing latency and boosting performance by 30%.

Bytepoint | Website

 ${f Typescript} \mid {f SvelteKit} \mid {f PostgreSQL}$

- Drove 100% of technical strategy and led the team to build a real-time competition results system using, SvelteKit and Supabase, supporting 4,000+ users across University of Bohol campuses.
- Optimized website performance using **Prisma Accelerate** and designed an intuitive **UI**, resulting in a **70**% **increase** in user engagement during peak university events.

Achievements

- National Semifinalist, CodeChum Programming Challenge, leading team among 40+ schools. (Certificate)
- Individual Semifinalist at CodeChum National Programming Challenge among 450+ students. (Certificate)
- Hacktoberfest Open Source Contributor. Earned 5 badges for code contributions. (Holopin)

Technical Skills

Languages: JavaScript, TypeScript, Python, Java, C/C++, SQL, HTML5, CSS

Libraries/Frameworks: React.js, Next.js, Node.js, Express.js, Django, Socket.io, Prisma

Developer Tools: Git, Docker, Kubernetes, Jenkins, Redis, Turborepo, AWS, Azure, Cloudflare, Jira, Linux