Bing Yu Yap

+1 (415) 312-3455 | San Francisco, CA | bingyu.yap.21@gmail.com

github.com/bingyuyap | linkedin.com/in/bingyuyap | luffy.sh

PROFESSIONAL SUMMARY

Applied Research Engineer with hands-on experience in LLM benchmarks, agentic harnesses, and rubric judges. Led six-figure projects with frontier labs to scale repo-level reasoning and reproducibility.

EDUCATION

B.Sc. Computer Science (AI), Singapore Management University – Aug 2020 to May 2024

WORK EXPERIENCE

Datacurve   Dec 2024 – Present
Founding Engineer   *San Francisco, CA*

- Led a **6-figure engagement** with a frontier AI lab to build a **benchmark of 20 real-world repos**, each with **3–4 subtasks** spanning **5k–10k LOC**, targeting repo-level reasoning, synthesis, and debugging. Established baseline evaluation showing **Gemini 2.5 Pro <20% pass@5**.
- Built an **autonomous harness** for repo-scale tasks that supports **test-time scaling** using both **verifiable rewards** (unit/integration tests) and **unverifiable rewards** (rubric-based judgments).
- Designed a **rubric-as-judge framework** where LLMs provide structured QA feedback and **iteratively self-improve prompts**, enabling more reliable and reproducible evaluation.
- Shipped an **interactive viewer** that traces LLM reasoning and tool-use step-by-step, giving researchers transparency into agent decisions and failure modes.

Roundzero   Oct 2024 – Dec 2024
Founder   *Singapore*

- Built a **real-time AI coding & system design interviewer** capable of parsing both **source code** and **Excalidraw diagrams**, executing solutions, and applying rubric-based evaluation.
- Designed rubric judges that assessed **correctness, scalability, and design trade-offs**, enabling structured, reproducible feedback for candidates.
- Conducted over **1,000 candidate interviews** prior to acquisition within three months, demonstrating rapid product-market fit.

Wormhole Labs   Dec 2023 – Dec 2024
Software Engineer   *Remote*

- Built a modular protocol in **Rust** that allows integrators to use multiple independent decentralized messaging protocols to attest to cross-chain messages.
- Built a **Solana** protocol for WorldChain to bridge the WorldID's Zero-Knowledge state root from Ethereum to Solana.
- Engineered a comprehensive monitoring system to ensure uptime of the decentralized systems and on-chain protocols.

Dust Labs   Jun 2022 – Dec 2023
Software Engineer   *Santa Monica, CA (Remote)*

- Built a large-scale generative pipeline that transformed **10,000 DeGods NFTs** into **70,000 unique images** by applying **7 metadata-conditioned style transformations** per asset.
- Achieved **<1 minute** end-to-end generation time per image using a **token-pool, messaging queue, and microservices architecture**.
- Designed a **token-pool distribution mechanism** to evenly allocate API tokens across concurrent jobs, increasing throughput and ensuring reliability under peak load.

SKILLS

Programming Languages	Java, C, C++, C#, Go, Rust, Python, JavaScript, TypeScript, SQL
Frameworks	Spring Boot, .NET, KiteX, Gin, Express.js, Ruby on Rails
Technologies	GraphQL, RabbitMQ, MongoDB, MySQL, PostgreSQL, Redis, Git, Jira
	Docker, Kubernetes, Tilt, AWS (EC2, Fargate, SQS, Lambda), Cloudflare (R2, Workers)