Changhyun Park

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EDUCATION

Stony Brook University   **Stony Brook, New York**
Bachelor of Science in Computer Science   *Expected Graduation: May 2025*

THREE.JS & WebGL EXPERIENCE

Portfolio Website (https://mattparkarchive.xyz)
- Designed and developed a dynamic portfolio using Three.js, React Three Fiber, custom shaders, and real-time physics simulations to create engaging 3D visual experience.

Three.js Project Archive (https://portfolio.mattparkarchive.xyz)
- Curated and maintained an evolving collection of WebGL projects, showcasing experimental and production-level applications of advanced shader programming, interactive animations, and physics-driven visuals.

WORK EXPERIENCE

Osmosis - Largest Decentralized Exchange in Cosmos Ecosystem   **San Fransisco, CA(Remote)**
Software Engineer   *Jun 2021 - Jan 2025*
- Rust & WebAssembly: Pioneered ICNS (Interchain Name Service) by adapting DNS infrastructure in Rust and CosmWasm, simplifying cross-chain user interactions. Drove adoption to 52,000+ registered domains within 3 months of launch.
- Performance & Optimization: Delivered cross-system performance optimizations, 400% performance speedup in IAVL database, 74% reduced SDK operation time, and 24% shorter Next.js builds via Webpack/SWC integration, enhancing network speed and application efficiency.
- GoLang & System Architecture: Architected high-performance network with Golang and Cosmos SDK, focusing on efficiency improvements that enhanced network speed and application responsiveness.
- Open Source Contribution: Core contributor to open-sourced Osmosis codebase. Spearheaded cross-functional feature development, contribtution and code reviews for 1000+ PRs.

RIIID - AI Powered EdTech Startup   **Seoul, Korea**
Frontend Engineer   *Oct 2020 - Feb 2021*
- Frontend & UI Development: Led end-to-end development of a flagship investor relations (IR) portal showcasing company products and metrics using React, Next.js, and Typescript.
- gRPC & High-Performance APIs: Pioneered gRPC adoption for inter-service communication, leveraging protocol buffers and HTTP/2 to streamline data workflows, achieving 5% faster transmission speeds and 3% lower latency vs. RESTful APIs.

Awake Corporation - Social Media Analytics Startup   **Seoul, Korea**
Co-Founder, Full Stack Developer   *June 2019 - Mar 2020*
- System Architecture & Development: Spearheaded end-to-end development and launch of a data analytics SaaS platform for Instagram influencers, enabling engagement trend prediction and content ROI analysis.
- Data Visualization & Backend Engineering: Architected scalable backend using MongoDB, Express, and Node.js, and built an interactive frontend with React, Redux, and D3.js for real-time data visualization.

PUBLIC SPEAKING

OsmoCon 2023
- Topic: "ICNS(Interchain Name Service) and Off-chain signature verification" - Watch

GopherCon Korea 2023
- Topic: "Programs without bugs" - Watch

IBC Summit 2022
- Topic: "Intro to Cosmos SDK" - Watch

TECHNICAL SKILLS

Languages & Frameworks: JavaScript, TypeScript, Python, C, Golang, Rust, React.js, Node.js
Graphics & 3D: WebGL, Three.js, WASM, Blender, GLSL
Tools & Other: Linux, Next.js, Webpack, SWC, Docker

AWARDS

- Cosmos Global Hackathon, 2021: 1st Place
- Goorm IDE Hackathon, 2020: 3rd Place
- Google Media Hackathon, 2019: Semi-Finals
- Army Achievement Medal, 2021, USA Commanding Major General