Aakarsh Singh

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EDUCATION

New York University Abu Dhabi	**May 2025**
B.A. in Interactive Media	**GPA:** 3.92/4.0
Minors in Computer Science, Sound-Music Computing and Art History	Abu Dhabi, UAE

Relevant Coursework: VR/AR Development, Web App Development, Algorithms, Data Structures, Discrete Mathematics, Natural Language Processing, Calculus, Game Development

EXPERIENCE

Callback **May 2024 - December 2024**
Fullstack Software Engineer Tokyo, Japan/Remote
- Deployed a customer main site with a user leader-board, leading to an **increase in weekly active users from 25 to 250** over a 3 month period using **Next.js, Typescript, Express.js and Firebase**.
- Designed and implemented a scalable social networking API , facilitating in-app user profile creation and friend connections, which boosted **app engagement by 100% within one month.**
- Engineered an enterprise dashboard that streamlined data visualization for clients, integrated Stripe payouts and sent weekly automated reports, resulting in **a 200% overall increase in partner retention.**

NYU Tandon @ The Yard **June 2024 - August 2024**
Spatial Computing Researcher New York City, USA
- Designed and integrated advanced motion capture and volumetric capture systems, **enhancing production efficiency by 35%** during a three-month research project focused on augmented/virtual reality productions.
- Independently developed and optimized multiple immersive **Unreal Engine** simulations and environments, resulting in a final production and prototype **presented to an audience of over 200 participants** at the NYU undergraduate research conference.

NEEEU Spaces GmbH **May 2024 - July 2024**
Creative Technologist Berlin, Germany
- Developed and deployed an augmented reality advertisement for a perfume brand, achieving **a 20% increase in customer engagement** compared to previous campaigns featured in BMW's annual lifestyle magazine.
- Crafted assets in **Cinema4D** and wrote custom shader code, resulting in an integrated pipeline that reduced **rendering time by half** while enhancing visual quality for the final project assembled in **Meta Spark Studio**.
- Created a **Unity** prototype for an innovative spatial audio adventure game devised for the visually impaired, leading to successful playtesting feedback and **over 1000 downloads** after a month of release.

PROJECTS

"Real" Art **November 2022**
- Developed an AI-based installation for **The Louvre Abu Dhabi** using **DALL·E 2 API, Next.js, Express.js and Firebase**, to gauge public perception and generate ethical discussions around AI-generated artworks.

TECHNICAL SKILLS

Programming Languages: Javascript, Python, C++, C#, OpenGL (WebGL), HLSL
Frameworks & Libraries: Typescript, Next.js, React, React Native, Vue, SCSS, Node.js, Express, Firebase, Docker, MongoDB, A-Frame, ml5.js, p5.js Three.js, WebSockets, Processing, Arduino, Automatic1111, ComfyUI
Software: Figma, Unreal Engine, Unity, TouchDesigner, Maya, Cinema4D, RedShift, Blender, Max/MSP, Jitter, Meta Spark Studio, Photoshop, Premiere Pro, Illustrator, AfterEffects, InDesign, Substance 3D Painter, Ableton