

Avi Shah

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Deep Learning & 3D Graphics Researcher, CEO of Sports Technology Company Effxcts LLC

EDUCATION

University of Florida

Aug 2022 – May 2026

Herbert Wertheim College of Engineering

Gainesville, FL

- **Degree:** Bachelor of Science in Computer Science | Minor in Mathematics | Certificate in Engineering Leadership
- **GPA:** 3.95 / 4.00
- **Coursework:** Data Structures and Algorithms, Software Engineering, Linear Algebra, Differential Equations, Human-Computer Interaction, Natural Language Processing, Physics (Mechanics and E&M)
- **Certifications:** NVIDIA Generative AI with Diffusion Models & NVIDIA Fundamentals of Deep Learning

EXPERIENCE

Effxcts LLC

Jan 2021 – Present

Founder & CEO

Boston, MA

- Founded Effxcts LLC, delivering computer vision and visual effects solutions for sports.
- Led 25+ projects for ESPN, NHL, and Red Bull, generating 50M+ social media views.
- Automated 90% of content creation by developing pose matching software for Bleacher Report.
- Specialized in 3D data visualization, modeling, simulation, rendering, and compositing.

Interactive Data and Immersive Environments Lab

Jan 2024 – Present

3D Computer Graphics Researcher

Gainesville, FL

- Building a pipeline for 4D reconstruction of NBA plays leveraging transformer-based 3D pose estimation.
- Conducted 10+ studies on assisted guidance in VR, presenting findings in weekly lab meetings.

Children's Hospital of Philadelphia at Penn

May 2024 – Aug 2024

Machine Learning Researcher

Philadelphia, PA

- Constructed image processing software to extract quantitative features from 300+ kidney scans.
- Trained a convolutional neural network with a 0.90 AUROC to predict surgery from identified features.
- Integrated three ML models into web-based tools with REST APIs for improved usability.
- Co-authored a manuscript and abstract, now under review for publication.

PROJECTS

Basketball Shot Detection - Deep Learning & Computer Vision

Jul 2023 – Aug 2023

- Developed a real-time basketball shot tracker with YOLOv8 models, reaching 20x speed with CUDA.
- Achieved 95% score accuracy and 97% shot accuracy by implementing data-cleaning algorithms.
- Shared a project breakdown video on LinkedIn, generating 300,000 impressions and 100 reposts.

SKILLS

Machine Learning: Tensorflow, PyTorch, OpenCV, Scikit-learn, Pandas, NumPy, CUDA, Matplotlib

Software Engineering: Full-Stack, REST, Flask, React JS, Flutter, Docker

Computer Graphics: Blender, Unity, Adobe After Effects, Premiere Pro

Programming Languages: Python, C++, C#, Java, MATLAB, JavaScript, HTML, CSS

Tools: GitHub, Visual Studio Code, IntelliJ, PyCharm, CLion, Excel, PowerPoint

Other: Social Media Marketing, Problem-Solving, Communication, Adaptability