# **Hoàng Minh Thanh**

#### **Senior Creative Developer**

I'm passionate about WebGL and rendering every pixel on <canvas> context. With hands-on experience from multiple React and Three.js projects, I am well-suited for the Senior Creative Developer role at CodeCrush and capable of contributing to the development of high-quality, interactive 3D web experiences.

## Summary \_\_\_

• Proficient in Three.is. WebGL and Web Technologies: openhuman-ai/renderengine 2, humanmodel.pages.dev 区/Code 区, GLSL Shader 区, faceanimation.github.io 区, hairrich.github.io 区/Code 区, React ThreeFiber 区, Skeleton Animation 2 ....

Vast experience of multiple React web project: (MillionScope Z, GENEALeaderboard Z, Cortexpod Z, MetaPet Z),... Hands-on experience in optimization scalable production 3D web assets.

- Skilled in Blender & Maya: Experienced in modeling, rigging, texturing, optimizing, and Profound understand GLTF JSON ☑ Structure for exporting web assets. Unity render ☑, Blender render ☑.
  - Skilled in Unity (Play my game Pucca Runner ☑)
- Comprehensive Understand Computer Graphic: Keyword learned: Ray Tracing in One Weekend, Subsurface scattering, Rendering Equation, pbrt-v4 🗹, webgl2fundamentals, Physics/Spectrum/Eye Vision of Color, ..., My Fillament doc remake (BRDF, Diffuse, Reflection).
- Experienced in English-speaking work environments: Technical discussions, writing documentation, and collaborating effectively with international teams.

## **III** Education \_\_\_\_\_

AS University of Science - VNUHCM. Information Technology 2012 - 2015

BS University of Science - VNUHCM, Computer Science Sept. 2018 - Sept. 2020

- GPA: 3.3/4.0
- Thesis: GCAT Link Prediction in Knowledge Graph ☑, Code ☑.

University of Science - VNUHCM, Computer Science MSc

Oct. 2021 - Dec. 2024

- GPA: 3.44/4.0
- Thesis: OpenHuman: A conversational gesture synthesis system based on emotions and semantics ☑, Code ☑, Huggingface ☑, Unity ☑, Demo ☑.

# **Experience**

Rakumo Inc, Software Engineer

Jul. 2019 – Apr. 2020

• Django Web: develop webapp integrate DocuSign.

FPT Software, AWS Data Engineer

Oct. 2020 - Nov. 2021

- CI/CD pipeline, implemented and modified real-time and batch data pipelines on AWS using Kinesis, Lambda, S3, Glue, StepFunction, SNS, etc.
- Collaborated with international teams in Agile development; established sprint planning and task tracking workflows using Rally and Jira. Technologies

#### **VNG Corp**, Software Engineer

Oct. 2021 - May 2024

ZDN Team (Zalo Content Delivery Network): caching service serve millions request

- Implement scheduled java ThreadPool for monitoring stats execution.
- Built React admin dashboard with server visualization via p5.js, amchart.js with NextJS 14.

renderengine.pages.dev <a>☑</a>

hairrich.github.io

millionscope.com

humanmodel.pages.dev <a>☑</a>

Pucca Runner 🗹

- GENEA Research Team (GENEA Leaderboard ☑, HEMVIP ☑): Developed a full-stack, production-grade from scratch leaderboard system using to evaluate multiple AI gesture generation models.
  - Technologies: Cloudflare Worker, R2, D1, NextJS App router, TailwindCSS V4
- DeepFACS 2: Create mutiple blendshape compatible with ARKit 52 for blendshape, using Faceform Wrap for transfer topology from 3DScanStore basemesh to facial expression.
- Unity based on the DeepPhase 'research paper. Practice Quaternion on each Keyframe animation in Unity. Retarget skeleton animation using MotionBuilder.

# </>> Projects

#### Three.js realisitic face for OpenHuman (Code 🗹)

 Loaded and scaled facial OBJ parts in Blender (eyeball, head, tongue, etc.); applied edited albedo, roughness, specular, clearcoat maps; configured DatGUI, environment toggle, and tone mapping for realistic facial rendering

#### HairRich - Three.js Hair for OpenHuman (Code ☑)

Loaded hair mesh and applied textured material in Three.js.

**3D Human Model with ReadyPlayerMe** (Code **)** Integrated and configured Ready-PlayerMe model with morph targets in Three.js.

MillionScope (Code ☑) ChatGPT-Clone with Chat SDK. Stream response result of Cloudflare Worker & AI.

#### Unity Game Pucca Runner (Code ☑)

• Use a hash map of 2D coordinates and Dijkstra's algorithm to find the shortest path. In the event loop, the runner moves toward the player. Trigger collision if Pucca catches the player, violates the ocean matrix, or reaches the final goal.

**Practice Three.js Reimplement Project** (Code **△**) - Deloyed with Cloudflare Pages.

Three.js Demo Project: GlowShader 🗹/ Code 🗹, SpringSphere 🗹/ Code 🗹, Vinfast Car 🗹/ Code 🗹, Jumming Girl 🖒/ Code ☑, Cross Sphere ☑/ Code ☑.

#### Others:

- MetaPet (metapet.vercel.app <a>Imple NFT Marketplace with Solidity, MetaMask.</a>
- cortexpod.com ☑/Code ☑; pithagon.com ☑/Code ☑: web blog with NextJS App router. Write Node.js to compile from markdown source to React components using unifiedjs, rehype, remark, mdx.js.
- Typescript Wedding Album ☑.

# Certifications \_\_

• Critical Thinking Certification 2014 🗹, Emotion Recognition Certification 2019 🗹, Summer ML 🗹

Coursera: Design Pattern ☑, TensorFlow Developer Professional ☑

2021 2021

AWS Solutions Architect – Associate 🗹, AWS Machine Learning – Specialty 🗹

2021

Solution Architect ☑

# Awards \_\_

- Award in The Good Chemistry District Student Contest
- Thach Thuc 2013 2, Thach Thuc 2014 2 Faculty of Information Technology, HCMUS

2009