BRETT HICKMAN

Programmer - Designer - Creator

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MY PROFILE

Dynamic and forward-thinking computer scientist with a passion for blending technology and artistic vision, seeking to make an impact in the field of creative computing. Proficient in spatial computing and experienced in leveraging emerging technologies, I am dedicated to pushing the boundaries of animation and entertainment experiences. Collaborating with artists, engineers, and designers, I aim to create immersive worlds and interactive storytelling by designing innovative animation engines, game engines, and spatial computing solutions.

EDUCATION

2018 - 2023
COMPUTER SCIENCE

California Polytechnic State University

SKILLS

C++, Java, Python, HTML, Javascript

Unix and Linux Development

Unity Development

Databases (MongoDB)

Graphics Pipeline / 3D Engines

Assembly / Binary

Photoshop / Illustrator / Premiere

Frontend Web Development

Effects Designer (Particle Simulations)

Artificial Intelligence

INTERESTS

Graphic Design / Art

Music Production

Film / TV / Games

D1 Track and Cross Country Running

WORK EXPERIENCE

TECHNICAL ADMINISTRATOR
Immersive Learning Research Network - California   6/24/23 - 6/30/23

- Supported XR conference tech issues, ensuring smooth operation.
- Assisted attendees with presentations for seamless experience.
- Designed & printed name badges under tight 24-hour deadline.

IT / OPERATIONS
Clearsource - California   6/12/22 - 9/5/22

- Maintained & troubleshot computer systems, providing tech support.
- Assisted in day-to-day operations, including assembly & shipment of water filters.
- Demonstrated multitasking skills, managing IT & operational tasks collaboratively.

EVENT FLOW COORDINATOR
Comic Con - San Diego   7/16/19 - 7/22/19

- Provided assistance and managed lines at Comic Con event.
- Efficiently coordinated and directed attendees for smooth entry and flow.
- Delivered exceptional customer service, maintaining positive atmosphere for visitors.

PROJECTS

See my website (linked above) for more details

VIRTUOSOS
- A rhythm / story unity game; worked with artists, musicians, and animators

GUNFIGHT
- A network multiplayer top-down shooter that is coming to Steam

EXPERIENCE
- A 3D game engine made from scratch with OpenGl and C++

ROOTSCAPED
- A game made for the 2023 Global Game Jam in 48 hours

PROCEDURAL ANIMATION
- Procedurally animated spiders using the F.A.B.R.I.K algorithm

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TO WHOM IT MAY CONCERN

San Luis Obispo, 7/6/2023

Recommendation letter for Brett Hickman

Dear colleague,

It is a pleasure to recommend Brett Hickman. Hickman has visited several of my courses and demonstrated a strong readiness to continue his skills as computer scientist and developer in animation, graphics and games. I met Brett Hickman in my computer animation course, where he expressed a strong grasp and curiosity for the fundamentals of graphics and the necessary mathematic skills for animation. Thus, I was his senior project advisor and consequently worked very closely with him.

Through going beyond the requirements of the assignments, Brett Hickman has demonstrated creative expression and mastery in Computer Graphics and Animation. Understanding the complex fundamentals such as modern graphics API's, quaternions, splines and Bezier curves, animation blending, skinning and inverse kinematics, Brett Hickman developed a procedural spider-leg animation with respect to any given terrain.

Moreover, Brett Hickman developed for his senior project the game "Virtuosos" with two of his peers. This is a fully working and published game, an achievement not many can write into their CV, and taught Brett Hickman all about minimum viable products, milestones, quality control and the ability to finish what was started. I entrusted Brett Hickman with co-organizing the iLRN 2023 (Immersive Learning Research Network) conference under my leadership at Cal Poly San Luis Obispo, where his abilities for prompt improvisation and outstanding soft skills shined visible for over 80 conference participants

During my career as specialist for Computer Graphics and Animation for the last seven years at Cal Poly San Luis Obispo, I had not more than a dozen students which I would consider as outstanding, and all of them are by now lead developers for a well known game series or successful entrepreneurs. I count Brett Hickman towards my top ten best students and can attest without hesitation, that Brett Hickman brings a most professional skills and resourcefulness into his future endeavors.

Yours sincerely,

Ass. Prof. Dipl. –Ing. Dr. Christian Eckhardt

Cal Poly College of Engineering

Department of Computer Science and Software Engineering

California Polytechnic State University