Jacob Zwang

Designer, Developer, Innovator

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2021 UCLA'S LAHACKS BEST 5 OUT OF 135

2020 NUEVAHACKS BEST DESIGN
"The judges were amazed by Jacob's vision and superb video demo, making it a clear cut winner for Best Design."

11 YEARS OF 3D MODELING IN BLENDER

I designed the Cheezbit brand for a group of developers, designers, and myself to work under. We were looking for a unique name that would set us apart from the crowd. While brainstorming we got slightly off topic and started talking about our favorite programming snacks. It turned out, many of us thought Cheezits were a fantastic programming snack. This got me thinking, "Cheezit", "cheez ... it", "cheez ... bit" "Cheezbit!" They loved it, and it was only a matter of seconds before I pictured the design in my head. Then over the course of a week, I made 10s of concepts, and as a team we settled on the one above.

This was a school project in high school. "Redesign our school logo" was the assignment. My school, Santa Monica High School, commonly went by the acronym Samohi or Samo. I knew using this would be the key to a great logo, but it did not come easy. I designed close to a hundred logos before I came up with this one. The blue color, crashing waves of the s and o, and modern aesthetic give it an undeniable beachy feel while still achieving a strong powerful brand image.

Most of my professional work thus far has focused on web and automation development but I also have an interest in working with construction, industrial design, and anywhere else I can innovate. I am currently studying construction management at California State University Northridge. I aspire to combine my skills in technology and physical construction to build and manage many large and complex projects.

WEB 3D GRAPHICS PROGRAMMING / PIPELINE
Monarch Gaming LLC, 2021

Monarch Gaming approached me to help build what they call Genopets. Genopets are 3d animated characters generated on the fly. That means that both their materials and models needed to be hot swappable. On it's own wouldn't be too hard, however, what made it difficult was that this all needed to run on a website and it needed to be fast. That puts loading all the models and all the materials out of the question. I was able to build a system for Genopets that would asynchronously load in models and materials over the web, all while keeping materials & animations consistent.

Programming was only half the battle though. Before I was hired, Monarch Gaming had commissioned artists to design and create the 3d models. The problem was that these models were created by artists used to working locally, not on the web. I started tackling this challenge by recreating the models to find what would best work on the web. Then, I used what I had discovered to write a modeling and design specification for creating future Genopets.

AUTOMATION DEVELOPMENT / UI DEVELOPMENT
Alden Pacific Investments, 2021

Alden Pacific Investments, a real estate company, was looking for a way to connect and learn about their customers in an automated way. My friend Henry Marks brought this job to me and together we helped design a fully self sufficient survey system for their leads. We wrote it in NodeJS, to ensure that their more beginner full time systems admin would be able to maintain it, and because there was an existing SalesForce api adapter for JavaScript.

The program went something like this: A lead would be added to their SalesForce database in some way or another. We would detect that new entry, and send an email to them. In the email, would be a link to a survey which had their user information encoded in it. As the lead filled out the survey, we would sync each and every question to the SalesForce database in real time. Once the lead was done, they'd get a thankyou, and then automatically be redirected back to the Alden Pacific Investments website.

WEB DEVELOPMENT / DATA MANAGEMENT / UI/UX
Gustav Carroll, 2021

After being recommended by a teacher, Gustav Carroll approached me with a problem. They are a furniture company, and they had previously been in many showrooms. However, due to covid they had a large inventory of product sitting around in warehouses. Together we devised a plan to build them a new website and integrate it into Ebay to allow easy posting of products to a platform with lots of users, while also having them automatically show up on their website.

C PROGRAMMING TUTOR
SMC Students, 2020

CONTENT MANAGEMENT / EVENT COORDINATOR
Open Climate, Yale Open Lab, 2019

DESIGN SKILLS
★ UI / UX
  Automotive
★ Architecture
★ Brand / Logo
  Infographic
  2D / 3D Animation
★ 3D Modeling
  Video Editing
  CGI

DESIGN TOOLS
★ Blender
★ Figma
★ Photoshop
★ Illustrator
  Indesign

PROGRAMMING TOOLS
★ JavaScript
  ThreeJS
  GLSL
★ TypeScript
★ Svelte
  ReactJS
  VueJS
  Rust
  C
  Scala
  PostgreSQL
  GraphQL
  Git
★ Google Cloud
  Debian
  Ubuntu
  Docker
★ Node
  Hasura GQL
  Java
  AWS
  Python

MANAGEMENT TOOLS
ClickUp
Notion
Team Gantt

Don't worry if a tool you work with isn't on my list, I can pick up most tools within a matter of hours.