

# Swan Carpenter

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thingsbyspoon.cc  
github.com/pitworker

Swan is a software engineer creating highly interactive tactile and web-based experiences.

## Education

**Carnegie Mellon University**  
Class of 2021  
Bachelor of Computer Science and Arts  
Focus in Environments Design  
QPA 3.61, College Honors

## Relevant Coursework

**Computer Science**  
Computer Systems  
Parallel & Sequential Algorithms  
Theoretical Ideas in Computer Science  
Principles of Imperative Computation  
Applied Machine Learning  
Robotics for Creative Practice  
Matrices and Linear Transformations  
Algorithmic Textile Design  
Conlanging with Language Technologies

## Design

Environments Design Studios I, II, III  
Electronic Media Studio  
Experimental Capture  
Futures  
Systems  
How People Work

## Skillset

<b>Web</b>	<b>Multimedia</b>
JavaScript/NodeJS	TouchDesigner
HTML/CSS	FFMPEG
TypeScript/React	C#/Unity
Google Cloud	
<b>Management</b>	<b>Mobile</b>
Git	Java/Android Studio
Batch/Shell	Dart/Flutter
	Swift/XCode
<b>Systems, Embedded</b>	<b>Misc.</b>
Rust	Python
C/C++	SML
Arduino	Electron

## Honors and Awards

**Armero Award for Inclusive Creativity**  
2021  
**Sole Project Recipient** for *Zobits*

**National American Advertising Award**  
2023  
**Gold** for *Doodles Genesis Factory*

## Work Experience

**Fullstack Developer | Freelance**  
October 2023 - Present  
Building key backend and frontend features for consumer-facing web applications and platforms. Clients include Magic Circle Game Studio.

**Creative Technologist (CT) | Deeplocal**  
June 2021 - May 2022 (CT 1), May 2022 - October 2023 (CT 2)  
Developing creative concepts and leading software teams for primarily tactile brand experiences for permanent installations and events. Clients include Google, Meta, Netflix, TikTok, Museum of the Future, and Virgin.

**UX Design Intern | Motional (JV between APTIV and Hyundai)**  
June - August 2020  
Prototyping and developing functional demo of a 3D map view within the management software for a large fleet of autonomous vehicles. Designs have since been implemented into the production software.

**UX Design Intern | APTIV**  
July - August 2019  
Designing and implementing interactive, location-based, contextual UI elements for in-car passenger displays for autonomous vehicles.

## Notable Work

**Google Cloud Next Postcards | Professional**  
Completed for event in August 2023  
Led development of software for a custom postcard printer that uses Google's Imagen and PaLM AI toolkits to generate customized illustrations and messages based on user-inputted memories and styles.

**Virgin Voyages Jen AI | Professional**  
Launched June 2023  
Collaborated on development of middleware REST API interfacing between frontend and AI server to generate, stitch, and stream custom (consensual) deepfaked invitation videos featuring JLo inviting the user on a personalized Virgin cruise experience.

**Google Marketing Live Pinball | Professional**  
Completed for event in May 2023, later permanently installed in Google offices  
Built prototypes and contributed to creative concepts, and later led development of software, in Unity, for a set of three custom pinball machines for Google's Marketing Live event. Software scope encompassed sensing from, and triggers to, in-game hardware features, scoring, game mechanics, and in-game cutscenes.

**TikTok TAC Moderation Workstation | Professional**  
Launched in LA February 2023, also launching in Dublin, Singapore, and DC  
Sole software developer for kiosk demonstrating TikTok's moderation process. Built in Electron, and enabling client content management via custom Strapi CMS, including full support for dozens of languages.

## Zobits | Personal

Completed May 2021  
Developed electronics and collaborated on code and designs for creative toy with which users populate a physical landscape with magnetic organism figures to define an animated, digital biome that evolves over the course of a week.