

EXPERIENCE**PromptLayer (Contractor)** (December 2024)**Software Design Engineer**

- Built a full-stack cake-recommending chatbot app from concept to deployment as a technical demonstration tool and Typescript-specific tutorial to show of the prompt-versioning capabilities of the PromptLayer product.
- Designed UI/UX flows, modeled ERD, defined Prisma schema, implemented Zod return-type validation, and mapped LLM-calls with prompt versioning logic and rate-limiting. [Deployed a demo](#) on Vercel with an integrated Neon DB.

General Fractal Corporation – New York City (May 2024 – Present)**Founding Operator**

- Spearheaded brand development, sales, marketing, facility ops, and externships for an in-person code bootcamp
- Growing the [NYC Tech Community](#) by organizing hackathons(1, 2, 3, 4+), building tools, & hosting events

Skycool Systems Inc. (Contractor) (Q1 2024)**Contract Manufacturing Engineer**

- Achieved a 17% reduction in BOM costs and over 80% labor savings by optimizing the design, manufacturing process and factory layout for Skycool's thermoregulatory system, enabling production scale-up from 1 to 150 units per month.

Alphabet Inc. (Contractor) (October 2023 – February 2024)**Design Engineer, Procurement Manager**

- ([Google Geo Team](#)): Engineered, prototyped, fabricated and shipped custom connectors for a PCBA-integration as part of a military-grade IMU/geopositioning instrument component assembly in a mechatronic hardware project
- (Project Moonboot[*formerly [Jacquard](#)]): Procured & integrated a custom, milligram-scale lithium-ion battery pack from an overseas manufacturer for a consumer hardware project's manufacturing scale-up.

Circuit Case Engineering – San Francisco, CA (May 2022 – June 2023)**R&D Engineer, CNC Programmer**

- Developed new business and contracts resulting in \$720,000+ of new-customer revenue over 9 months
- Programmed, setup, & ran CNC mills for machining contracts, delivering 1200+ units of 40+ parts for 11 customers

Factorita Industries, Inc. – San Francisco, CA (February 2022 – Present)**Founder, Principal Engineer**

Over two years after founding Factorita, we established *four* innovative manufacturing plants with four customers:

IV Recurrent Labs – Oakland, CA (May 2023 – September 2023)

Built a Factorita and procedural CAD-CAM programs to generate & mill unique, digitally-interactive brass tokens

III Machinedplates.com(CCE North Holdings, LLC.) – Orland, CA (November 2022 – April 2023)

Developed a parametric [CAD-interfacing web-app](#) & Built a dedicated factory that streamlines the design, DFM, and production of custom-machined 6061 aluminum plates in a semi-automated 6500sqft machine shop.

II Icon Technologies, Inc. – Vallejo, CA (May 2022 – November 2022)

Built a factory that makes polyurethane molds for in-the-field casting of window-sills & lintels for 3D printed buildings

I G&J LLC – San Francisco, CA (October 2021 – April 2022)

Built a robotic fiber-reinforced concrete spraying robot to produce concrete heated furniture on open-face molds

Astarita Research, Inc. – Wayne, NJ (January 2020 – Present)**Founder, Principal**

- Invented, Developed, filed Patents for 25 consumer hardware products. Built a team and executed on the production of sellsheets, digital assets, IP, and marketing content to deliver to our backers and licensing partners.

RedyRef Interactive Kiosks – Riverdale, NJ (May 2016 - August 2018)**Junior Design Engineer**

Engineered kiosk system integration, enclosure design, and facilitated manufacturing from concept to execution on several new product introductions for partners **Wendy's, Micros/Oracle, Dell, AT&T, American Well, and EJ Ward.**

ACADEMIA**Applied Physics/Materials Science with a focus in Nanofabrication**

Cross-Enrollment Student — California Institute of Technology (Pasadena, CA)

(2018 – 2020)

Product Design

ArtCenter College of Design, (Pasadena, CA)

(2018 – 2020)

Industrial Design

Wentworth Institute of Technology (Boston, MA)

(2016 – 2017)

Architecture, Engineering, Design Foundation

Wayne Valley High School, (Wayne, NJ)

(2011 – 2015)