GABRIEL COHN

415.548.3087 | gabe.j.cohn@gmail.com | gabecohn.com | www.linkedin.com/in/gabrielcohn

SENIOR MECHANICAL ENGINEER

Product Development | Product Design | Staff ME

20+ years leading development of innovative products and robust engineering services to diverse clients from startups to Fortune 500 industry leaders. Drives seamless product development from concept to FDA-approved production in fast-paced environments. Expert in design and launch of complex consumer electronics and medical devices, including wearables. Extensive experience with EMI/RF sealing, injection molded parts design, and multi-sized RF antenna integration. Proven ability to lead cross-functional teams, manage project lifecycles, and implement DFM strategies. Deep proficiency in CAD design, rapid prototyping, thermal analysis, and product validation. Leverages strong problem-solving and communication skills to drive innovation and ensure market success. Consistently delivers top quality work within budget, deadline, and scope

SELECT CAREER HIGHLIGHTS

- ✓ Identified optimal resins and epoxies, developed a selection process, and determined ideal curing profile for the selected encapsulant. Increased manufacturing yield 95% to 99% and decreased field failures 2.00% to 0.25%.
- ✓ Designed and prototyped 50+ functional wireless transmitter (TX) and receiver (RX) solutions for a range of clients.
- ✓ Contracted with a top-tier global tech company that needed to dissipate a large amount of heat while maintaining a very small footprint. Had heatsinks machined based on thermal simulations and wrapped the product in an insulating 3D printed shell service was delivered within extremely aggressive deadlines.
- ✓ Developed a novel disposable gasket system for airtight encapsulation, enabling mass production and solving a critical manufacturing hurdle.
- ✓ Recruited top talent to delegate tasks to high performing subcontractors. Executed diverse projects such as design and development of medical devices, solar robots, tracking devices, and semiconductor testing systems.
- ✓ Led mechanical development of a cuffless blood pressure monitor, producing prototype designs now in clinical trials.

CAREER EXPERIENCE & MILESTONES

Movano Health Pleasanton, CA

2022 - 2025

MedTech company focused on developing wearable health solutions

DIRECTOR OF MECHANICAL ENGINEERING

Hired as the company's 1st ME, tasked with bringing the flagship product (Evie Ring) to market, including development of eight ring sizes, complex, micro-molded and injection molded components, and a portable charger. Led a cross functional team (engineer, lab tech, etc.). Collaborated with the VP of Engineering to develop budgets, ensure accurate financial forecasts, and gain consensus on expenditures.

- Spearheaded a seamless product lifecycle from prototype through FDA-approved production, overcoming diverse manufacturing challenges.
- Utilized Amorphous Metal Injection Molding (AMIM) to design the ring's shell. Designed the charger to utilize magnetic charging contacts for a 'screwless' assembly.
- Led the mechanical team post-launch, enhancing durability, performance, and documentation for FDA approval.
- Managed complex projects within budget, ensuring transparent communication with stakeholders and presenting updates to executives.
- Awarded one US patent. Received consistent "exceeds expectations" on annual reviews.

Gabe truly shines in moments of complexity—when faced with tough challenges or high-pressure situations, his natural leadership, calm demeanor, and logical, process-driven approach help the team stay focused and productive without unnecessary stress... His ability to see the big picture while mastering the details sets him apart.

~ Abdul Iqbal, Head of QA &Customer Success, Movano Health

Specializes in wireless power technology. 30-50 employees, with \$1.1M annual revenue.

SENIOR STAFF / MECHANICAL DESIGN ENGINEER

Worked with cross-functional teams (industrial, antenna, electrical engineers) to define requirements and deliver solutions. Led robust technology evaluation on rapid two-week to six-month timelines. Produced Proof-of-Concept (PoC) models, securing stakeholder buy-in. Improved product performance through extensive testing, thermal simulations, and defining appropriate manufacturing methods (machining, 3D printing, urethane casting, sheet metal, laser-cut antennas, off-the-shelf components, etc.).

- Optimized thermal profiles to manage heat dissipation in power-hungry systems.
- Applied thermal calculations and FEA to engineer innovative cooling solutions.
- Leveraged strong material understanding to fully integrate antennas into designs.
- Worked with antenna engineers on rapid mock-ups using laser-cut foil and in-house fabricated components.
- Managed procurement processes. Created 2D and 3D documentation. specifically addressing heat management for users in high-power transmitters.
- Awarded one US patent related to wireless charging of AR glasses.

** * **

Career Note: Additional experience as Senior Product Design Engineer, *Argyle Design*: Designed sheet metal and injection molded components for high-volume consumer electronics. Performed thermal and airflow analysis using CFD tools. Developed 2D drawings and technical documentation. Recognized for creative problem solving and innovating a proportional time delay relay that significantly increased AC efficiency. Research & Test Engineer, *Proctor Engineering*: Leveraged expertise in parts design and wind tunnel analysis to develop functional prototypes and test HVAC components. Used SolidWorks in fluid dynamics simulations. Developed and calibrated custom sensors. *Details upon request*.

CONSULTING WORK

Empirical Design Co., Mill Valley, CA PRINCIPAL / FOUNDER

2013 - Present

Built out a consultancy, leveraging extensive mechanical engineering and project management experience in diverse fields. Defined and clarified product requirements. Designed intricate parts and assemblies using CAD. Collaborated with vendors to enhance Design for Manufacturability (DFM), produce prototypes, obtained quotes, and sourced components. Conducted thermal simulations and iterated design changes to optimize thermal profiles. Performed fluid simulations to improve fluid systems. Successfully brought more than five high-tech products to market. Assisted PhDs at a semiconductor company in identifying and overcoming product roadblocks. Taught a workshop on thermal simulation for a design firm, receiving positive feedback from 20+ mechanical engineers.

EDUCATION

Bachelor of Science ~ Mechanical Engineering; University of California, Berkeley **Bachelor of Arts ~ Latin American Studies;** University of California, San Diego

ADDITIONAL INFORMATION

Patents: US12218519B2, USD1046771S1, US10226136B2

Product Inventor: <u>www.willawalker.com</u>

Technical Snapshot: SolidWorks, SW Flow Simulation, MS Office Suite

Languages: English, Spanish

AREAS OF EXPERTISE

Product Development, Mechanical Engineering, Prototyping, CAD Design, Manufacturing Processes, Project Leadership Thermal Simulation, FEA (Finite Element Analysis), Cross-functional Collaboration, Root Cause Analysis Material Selection, Thermal Analysis / CFD / Flow, Rapid Prototype Design, Medical Devices, Project Management DFM (Design for Manufacturability), FDA Approval, Consumer Electronics, Wireless Charging, Problem Solving Product Validation, Systems Integration, Team Leadership, Wearable Design, Detail Oriented