



PROFESSIONAL SUMMARY

Shop Technician and Industrial Designer with 6+ years of hands-on experience in shop operations, equipment maintenance, prototyping, model making, and fabrication across wood, metal, foam and 3D printing facilities. Adept in maintaining safe and efficient shop environments, as well as equipment calibration, inventory management, and training personnel on proper tool usage and protocol.

Proven ability to collaborate with multidisciplinary teams, ranging across Industrial Design and Soft Goods prototyping, to Architecture and Furniture Modeling. Skilled in translating conceptual sketches, technical drawings and CAD modeling into high-fidelity mock-ups across a variety of materials and techniques. Experienced with material selection, vendor coordination, and shop fabrication using power tools, CNC machines, 3D Printing, manual tools, and advanced finishing techniques. Mechanic and Product Design background with strong aesthetic and technical insight for product innovation and presentation.

CORE COMPETENCIES

Mock-up & Prototype Development: Physical model construction, proof-of-concept prototyping, ideation, build strategy and planning, part assembly and installation, presentation development, engineering validation mock-ups, electrical development, graphic design and UI development

Shop Operations & Maintenance: Facility management, equipment service, tool calibration and setup, inventory management, shop safety protocols, OSHA compliance, preventive maintenance, shop space planning, and workspace organization

Fabrication & Model Making: Woodworking, metalworking, foam fabrication, plastic and vacuum forming, casting and molding, surface finishing, part assembly and building, detail-oriented craftsmanship, material exploration, high-fidelity functional prototyping, and model painting and finish

Technical Design & Documentation: CAD modeling, sketch and technical drawing interpretation, assembly and part drawings, mock-up documentation packages, build instructions, development presentation and validation, material specifications, vendor coordination, tolerance verification, mechanical troubleshooting, and electrical diagnostics, and mathematics proficiency

Tool & Equipment Expertise: Bridgeport machines, CNC routers and mills, laser cutters, table saws, band saws, hot wire cutters, drill presses, routers, lathes, sanders, grinders, vacuum formers, planers, jointers, 3D printers (FDM, SLA, SLS), sand blasters, paint guns, soldering tools, power tools, hand tools, calipers and measuring tools

Software Proficiency: Rhino, Solidworks, AutoCAD, Keyshot, Cinema4D, Figma, Arduino Coding C++, Microsoft Office Suite, and Adobe Creative Suite (Photoshop, Illustrator, InDesign)

Manufacturing Knowledge: Manufacturing Processes, material properties and selection, production feasibility, quality control, assembly methods, design-for-manufacturing, and finishing techniques

Professional Skills: Project management, budget and timeline planning, team training, safety instruction, multidisciplinary team collaboration, market research, design concept communication and sketch interpretation, presentation skills, communication and outreach, team leadership, and independent problem solving

EDUCATION

Bachelor of the Arts, Industrial Design California College of the Arts, San Francisco, CA **2016**

- Honors Program Graduate
- Relevant Coursework: Product Design, advanced model making, prototyping, materials and fabrication, CAD drafting and modeling, sketching and presentation, technical drawing, manufacturing processes, and market research

CAREER EXPERIENCE

Freelance Design | Product Design, Architectural CAD, Graphic & Web Design **2016-present**

- Provide product development services including conceptualization, sketching, refinement, 3D CAD modeling, prototyping, and documentation for clients
- Develop architectural CAD drawings from sketches, elevations and plans, dimensioned technical models, and presentation renderings for retail, commercial and residential projects
- Create Corporate Identity Branding including, Logo, Web Design and UI, and Banners, Stationery Systems, and Print-ready files utilizing Adobe Creative Suite
- Manage project timelines, presentation, client meetings and coordination to ensure high-quality deliverables

Rad Power Bikes | Lead eBike Mechanic **2022-2024**

- Led daily shop operations and the service team to and maintain an safe, organized and efficient workspace in a high-volume repair and assembly environment
- Diagnosed, troubleshot and repaired mechanical and electrical systems on electric bicycles, including motors, controllers, batteries, drivetrains, hydraulic and mechanical brakes
- Managed parts inventory, tool organization and procurement, and equipment maintenance to minimize downtime and optimize workflow
- Trained and mentored junior mechanics on proper repair techniques, safety procedures, and quality control standards
- Collaborated directly with Product Development, Manufacturing and Quality Control teams to identify design issues, tested prototypes, and recommend product line improvements based on technical and field experience
- Conducted regular quality inspections and pre-delivery assembly verifications ensuring products met manufacturing and presentation standards

MADesign | Retail Architecture and Interiors, CAD Modeling **2015-present**

- Assist with design and development of retail environments, merchandising fixtures, and architectural models using CAD software
- Interpret architectural drawings, sketches, elevations, and plans to create accurate 3D models and technical drawings
- Produce photorealistic renderings and presentation materials using Rhino, Keyshot, and Adobe Creative Suite
- Explore and define material choices and construction methods for fixture design and installation
- Coordinate with architects throughout the design process to ensure dimensional accuracy and design intent

California College of the Arts | Shop Technician, Material and Advisory Staff **2012-2016**

- Helped manage a multi-discipline fabrication facility including woodshop, metal shop, furniture shop, 3D printing lab, sewing studios, and CNC machines serving 1000+ students and faculty across Industrial Design, Interior Design, Architecture, Furniture Design, Fashion programs and more
- Assisted students organizing and completing projects under tight deadlines, teaching fabrication skills, and efficiently constructing mock-ups and finished prototypes using diverse materials and techniques
- Collaborated with professors to plan and execute complex design projects to best inspire and teach students prototyping and modelmaking design, advanced fabrication processes and use of specialized equipment
- Demonstrated expertise with shop equipment ranging from CNC mills and 3D printing to handheld power tools and craft techniques
- Provided technical expertise on material selection, fabrication methods, prototyping strategies and design principles to guide academic design projects and coursework assignments
- Maintained, calibrated, and performed preventative maintenance on all shop equipment including CNC machines, Bridgeport mills, table saws, band saws, lathes, 3D printers, power tools, and hand tools
- Managed inventory, organization, procurement, and sales operation for shop tools, supplies and materials
- Enforced shop safety protocols, conducted safety training, and supervised students during equipment operation and shop use

B+N Industries | Retail and Architectural Systems Development, Design Internship **2015**

- Supported retail fixture and architectural product development using 3D CAD modeling and rendering software
- Assisted senior design teams with design ideation, material exploration, prototyping and refinement for modular retail display systems
- Participated in design reviews and developed designs, technical documentation and CAD renderings to adapt and refine fixture offerings for a residential environment
- Worked with teams to develop a system to archive and define past project files for future automated use