

Arvind Bhallamudi

Industrial Design, Engineering and Strategy

My practice investigates the intersection of human and environmental health through materials, products and systems rooted in accessibility, efficiency and regeneration.

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Providence, RI 📍

arvindbhallamudi.com 🌐

PROFESSIONAL EXPERIENCE

Co-Works Interdisciplinary Lab • Intern + Graduate Instructor

Aug 2022 – May 2023 • Rhode Island School of Design, RI

- Improved the spatial layout, handled inventory, maintenance and created a guide for how to use four 3D printing stations (FDM, SLA, ceramic, paste) for design and prototyping.
- Conducted 100+ trainings and consultations for team members, students and faculty on equipment including 3D printers, laser cutters, vacuum formers and biomaterials.

Curiosity Gym • Designer + Innovation Lead

Mar 2020 - May 2021 • Mumbai, India

- Led industrial design and fabrication of products, exhibits, protective equipment; and handled web development and digital marketing campaigns that improved search rankings.
- Conducted lectures, workshops and mentorships on design thinking, product design and innovation for 500+ students across prestigious schools and colleges.

Dimiour Design • Founder + Lead

Sep 2019 - Dec 2021 • Mumbai, India

- Launched a venture providing services in industrial design, mechanical engineering and 3D printing. Completed 50+ projects, delivering 600+ parts to customers.
- Developed online systems for business operations, marketing, and sales. Formed a five-person team to explore the market, optimize processes, deploy products and improve.

National Institute of Interdisciplinary Science & Technology • Freelancer

Jun 2019 - Sep 2019 • CSIR Trivandrum, India

- Designed the spatial layout and developed 3D CAD models for safely operating four units - 3D Printing, Molding, Melting and Sand Reclamation of an IoT-based SMART Foundry.
- Designed a comprehensive and user-friendly dashboard to view and control the system. with intuitive graphics for tracking, analysis and feedback.

Biomedical Engineering & Technology Innovation Centre • Intern

Jan 2018 - June 2018 • IIT Bombay, India

- Developed and fabricated three medical devices that were tested in clinical trials: transfemoral prosthesis, heart valve surgery tool and glaucoma screening device.
- Won the Most Distinguished Paper at the International Conference on Research into Design and drafted and filed a patent 'Headgear Ophthalmic Device'.

IDC School of Design • Intern

Jun 2017- Jul 2017 • IIT Bombay, India

- Designed a lightweight and eco-friendly cane palkhi (rattan palanquin), to reduce the load on the shoulders and back of porters carrying pilgrims at Vaishno Devi and Elephanta Caves.
- Co-created the cane palkhi with craftsmen using native heating and bending techniques, supporting local employment with a sustainable alternative to the current steel version.

PATENTS & PUBLICATIONS

Headgear Ophthalmic Device

2020 • Symbiosis University + IIT Bombay • #WO2020141499 WIPO

Multi-Directional and Multi-Functional Lighting Assembly

2020 • Dimiour Design • #201921050663 in filing

Design for Tomorrow, Volume III

2020 • IDC School of Design

Proceedings "Novel Head-Mounted Ophthalmic Device for Monitoring Glaucoma"

Industry 4.0 and Advanced Manufacturing

Accepted 2022 • Curiosity Gym

Proceedings "Creator Ecosystems using 3D Printing in Digital Design Education"

EDUCATION

Rhode Island School of Design

2021 – 2023 • Providence, RI

Master of Industrial and Product Design

MID Thesis: Fungi in Flux, material ecology and product design with local waste and mycelium.

Brown University

Fall 2022 • Providence, RI

Master's Course, Energy and the Environment

Symbiosis Institute of Technology

2015 - 2019 • Pune, India

Mechanical Engineering, Bachelor of Technology

B.Tech Project: Glaucoma Screener, a compact diagnostic device to check intra-ocular pressure.

SKILLSETS

Industrial + Product Design

Qualitative and Quantitative Research, Problem Identification, Design Thinking, Concept Design, CAD, Rapid Prototyping, Packaging, Rendering
Rhino • Fusion360 • Keyshot • OnShape

Engineering + Manufacturing

Mechanical Design, Design for Manufacturing, Design for Assembly, 3D Scanning, 3D Printing, Molding, Laser Cutting, Vacuum Forming, CNC, Circuits, PCB and Arduino Integration
Solidworks • AutoCAD • Meshmixer • Cura

UI/UX Design + Marketing

Storyboarding, Wireframing, Digital Design and Prototyping, Graphic Design, Branding, Web Design, Automation, SEO, SEM, SMM
Figma • Wix • Google Analytics/Ads • Adobe Suite

Strategy + Management

Planning and Visioning, Life Cycle Assessment, Resource Optimization, Process Streamlining, Quality Control, Lean Methods, Data Analysis, Vendor Management, Performance Testing
Google Docs • MS Office • Statistical Tools

Communication + Collaboration

Cross-Functional Collaboration, Leadership Stakeholder Communication, Decision Making, Teaching, Workshops, Sprints, Writing
Zoom • Microsoft Teams • Slack

Media + Graphics

Advanced Photography (Lights, DSLR, Macropod), Cinematography, Audio Editing and Production, 3D Modelling, Rigging and Animation
Adobe Suite • Blender • Audacity • LMMS

Linguistic

English (full proficiency), Hindi, Telugu

ADDITIONAL EXPERIENCE

RISD Global Biodesign NYC · Teaching Assistant

Jan 2023 · Rhode Island School of Design

- Assisted with organization, communication and mentorship during a five-week course at New York City and conducted a lecture on mycelium and algae biomaterial design.

Hyundai Design Studio · Technical Assistant

Jan 2022 – May 2022 · RISD X Hyundai Collaborative

- Setup and assisted participants in the use of digital media equipment including macropod cameras, underwater drone, high-fidelity microphones, GPS and weather station.

Edna Lawrence Nature Lab · Biomaterials Assistant

Jan 2022 – May 2022 · Rhode Island School of Design

- Conducted weekly biomaterial trainings and consultations across RISD and Brown. Conducted bioplastic workshops for courses 'Digital Ceramics' and 'EFS Design Studio'.

Sustainable Futures Exhibition · Assistant Curator

Nov – Dec 2022 · RISD X Hyundai Collaborative

- Designed spatial layout and structures, created written collateral, organized participant logistics for 20+ exhibits, and managed graphics and prints as part of a six-person team.

Design X Health · Program Manager

Nov 2021 – Dec 2022 · Brown University + Rhode Island School of Design

- Managed industry partnership projects, including RI Department of Corrections, designing graphics, prints and a website. Assisted with outreach, program planning, event organization.

RISD Grad Exchange · Speaker

May 2023 · Rhode Island School of Design

- Presented a culmination of my thesis work to graduate students across departments and conducted a workshop survey to collect, visualize and analyze responses from 40 participants.

RISD Industrial Design Department · Workshop Instructor

Jan 2023 · Rhode Island School of Design

- Conducted a two-hour workshop in the winter course Mold(ing) to introduce six participants to methods in mycelium bio-fabrication using local waste and custom vacuum-formed molds.

Brown-RISD Innovation Community · Guest Speaker

Oct 2022 · Brown University + Rhode Island School of Design

- Presented research, design process and samples of dissolvable seaweed packaging for food and condiments, created from green algae collected from Narragansett Bay, RI.

RISD Division of Architecture & Design · Sustainability Liaison

Oct 2022 – Jan 2023 · Rhode Island School of Design

- Connected environment, climate and sustainability organizations across RISD and Brown University campuses, conducted talks and workshops that increased community engagement.

RISD Industrial Design Department · Makerspace Monitor

Feb 2022 – May 2022 · Rhode Island School of Design

- Maintained the department makerspace and provided support on rapid prototyping.

SP Jain Institute of Management and Research · Mentor and Speaker

Mar 2021 · Curiosity Gym, Mumbai

- Conducted a workshop series on 'Product Design and 3D Printing' for 200 post-graduate management students and mentored 15 teams on their capstone projects.

eMedha Medical Device Hackathon · Design Mentor

Jan 2023 · Biomedical Engineering and Technology Innovation Center, IIT Bombay

- Mentored an interdisciplinary team of doctors and engineers on 'Robotic Laparoscopic Surgery with Haptic Feedback' that won 'Most Ingenious Design Award'.

Conference on IPR, Patents, Copyrights, Innovations, Startups · Speaker

Feb 2020 · Pimpri Chinchwad College of Engineering, Pune

- Presented the design-led innovation process and intellectual property of a novel medical device, designed and tested for early detection of glaucoma.

AWARDS

Design Research Award

2023 · Rhode Island School of Design

Mark Harrison Grant

2022-23 · Rhode Island School of Design

Somerson Sustainability Innovation Grant

2022-23 · Rhode Island School of Design

Fred M Roddy Scholarship

2022 · Rhode Island School of Design

RISD Fellowship

2021-23 · Rhode Island School of Design

Corona Design Challenge

2020 · IDC School of Design, IIT Bombay

Most Distinguished Paper

2020 · International Conference on Research into Design, IDC School of Design

Indian Karting Championship

2019 · Ranked 8th out of 132 national teams for Go-kart design, manufacturing, testing and racing

Limca National Record

2013 · Maximum people solving a Rubik's cube within stipulated time (60s), IIT Bombay

CERTIFICATIONS

Advanced Google Analytics

2021 · Google Digital Academy

Design Engineering in a Circular Economy

2021 · TU DelftX, Coursera

Delft Design Approach

2020 · TU DelftX, Coursera

Camera Control

2019 · Michigan State University, Coursera

EXTRA

Electronic Music

2020 · 'Tartarus' EP and 'Tosh' composed, produced and released on YouTube, Spotify, Apple and Amazon Music.

Wildlife Photography

2010 - Present · Trailing and photographing endangered species including Blackbuck, Bengal Tiger and Star Turtle in natural habitats.