Parth Bhatt

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Objective

- To obtain a position as an engineer performing multidisciplinary product design in a technical and creative capacity

Education

MS | DECEMBER 2016 | NORTHWESTERN UNIVERSITY
- Major: Engineering Design and Innovation, GPA 3.875

B. TECH | JUNE 2014 | VELLORE INSTITUTE OF TECHNOLOGY
- Major: Mechanical Engineering, Specialization in Energy, GPA 3.2

Experience

DESIGN ENGINEER INTERN | HLB LLC | JUNE 2016-AUGUST 2016

- Theoretically validated design parameters using spreadsheet formulae before jumping into 3D design
- Generated novel Intellectual Property around an electronic jobsite appliance to meet client demands
- Performed CFD simulations of concepts to test viability using SolidWorks Flow
- Created CAD models using SolidWorks for rapid prototyping using SLA
- Created CAD models of complex assembly for manufacturing of looks-like works-like prototype using SolidWorks

FABLAB TECHNICIAN | CEPT UNIVERSITY | OCTOBER 2014-JULY 2015

- Taught architecture students to use rapid prototyping & digital fabrication tools including laser cutters, CNC milling machines, electronics manufacturing, 3D printing, vinyl cutting, molding & casting
- Assisted startup companies with design and fabrication of prototypes in a technical capacity (CAD, Dimensioning, design for fabrication)

Relevant Class Projects

EDI MASTER'S THESIS | FLEX | SEPTEMBER 2016

This project revolved around trying to prevent repetitive motion injuries in musicians by promoting prophylactic action before and after practice

- Performed Human Centered Design research to help define problem and possible solutions
- Created rapid prototypes to validate design directions
- Designed and Implemented Electronics/Mechanical system Using the Arduino and Processing Environments (Load cells, Linear actuator, GUI)
- Iterated on Prototype with two rounds of user testing

HUMAN CENTERED DESIGN WITH P&G | OCTOBER 2015

This project sponsored by P&G involved conducting several rounds of consumer research to discern the needs, wants, and tensions of consumers. Performed design research through intensive interviews and user testing

- Conducted Need-finding via in-home contextual interviews, on-site user testing and surveys
- Generated and prototyped several CAD models for rapid prototyping (SLA) using SolidWorks
- Created UI/UX prototypes using Adobe creative suite
- P&G has acquired the Intellectual property of the project from us

DESIGNING PRODUCT INTERACTIONS | BODY HERO

This project involved the design of an interaction with music different from the norm. We created a new for users to experience music by playing it on their bodies

- Technical Lead
- Researched and implemented interaction elements (moving lights, haptic feedback, 'magic' opening mechanism)
- Designed and Implemented Mechatronics/Electronics Using the Arduino Environment (Neopixels, Wave function generator, hall sensors, servos)

Skills & Abilities

- CAD/CAM(Solidworks/NX)
- Digital Fabrication (Laser Cutting, 3D Printing, CNC milling)
- Rapid Prototyping
- Mechanism Design
- Design for Manufacture and Assembly
- Interaction Design(Proto.io)
- Human centered Design
- Communication Design (Adobe Creative Suite)
- PCB Design (Eagle CAD)
- Electronics Programming (Arduino IDE/C/C++)
- Electronics Production (Soldering, Debugging, Board Layouts)