

## PRODUCT DESIGNER

### Professional Summary

4-5 years engineering experience and 1-2 years working experience. Able to work independently and under pressure, detail oriented, excellent problem solver, Innovator. Efficient Mechanical Engineer leveraging a strong technical background in bringing products from the laboratory to mass-manufacturing. Mechanical Engineer with [Number] + years of training in varied industries, including manufacturing and high-tech environments. Creative manufacturing engineer. Lead team member on process redesign for [Describe product] . Design engineer who has worked on [Number] new products, including the [Product name] recognized for industry excellence.

### Skills

- CAD
  - Complex problem solving
  - Stress analysis training
  - Component functions and testing requirements
  - Technical direction and product strategies
  - Works well in diverse team environment
  - Strong decision maker
- Engine components, pumps, and fuel systems knowledgeFEA toolsAutoCAD proficientTeam leadershipManufacturing systems integrationManufacturing systems integration

### Work History

Product designer 10/2014 to Current

Company Name " City , State

- The team wants to develop a portable, easily shipped, cost effective hardware that can send and receive digital content directly from satellites.
- Personally involve with prototype designing and 3D modeling.
- Cooperating with a startup called Outernet (<https://www.outernet.is/en/>), a for-profit media company that already has two satellites covering North America, Europe, and the Middle East and has recently started broadcasting free Internet content.
- Assisting drafters in developing the structural design of products using drafting tools or computer-assisted design (CAD) or drafting equipment and software.
- Completing project mechanical design while providing technical solutions feedback.

product design 09/2014 to Current

Company Name " City , State

- Two engineers and designers to collaborate together to create new innovative wearable pieces for a fashion show competition.
- Will access new Makerspace, which includes a 3D printer, will be given a \$500 budget to create their wearable piece.

RESEARCH EcoPRT Research Assistant 01/2014 to 05/2014

Company Name " City , State

- The goal is to develop an economical, automated transit system.
- It will focus on the hands on design and development of a small manned autonomous vehicle.
- [www.ecoprt.com](http://www.ecoprt.com)).
- The key in the design is to understand the impact weight has on the overall cost and performance, and the incorporation of automated control.
- Aspects of the development will possibly include

product design 01/2014 to 05/2014

Company Name " City , State

- VOLUNTEER The purpose of this project is to design and fabricate a cable management system for a public-access electric EXPERIENCE vehicle charging station.
- This system will dispense and retract 20 feet of cable for operation and provide secured storage for the cable when not in use.
- The prototype will be subjected to the following constraints

Team member 10/2013 to 04/2014

Company Name " City , State

- Attending scheduled control and mechanical teams' training classes.
- EXPERIENCE : Learned shop safety, vehicle glider equations, drive cycle modeling, and Simulation.
- Learned the powertrain architecture and components of the 2013 Chevrolet Malibu.
- Learned vehicle dynamics.
- And practiced model simulation by using MATLAB Simulink.
- Mechanical Engineering Components design project (material design).

material design 10/2013 to 04/2014

Company Name " City , State

- Designed fillet welds connections and bolts for the plate girder, which holds the pipe with horizontal and vertical force loads.
- Calculated the related shear or bending stresses for the welds and bolts to determine the right materials and sizes of welds (thickness) and bolts.

Eddy Current DYNO Research Assistant 09/2013 to 05/2014

Company Name " City , State

- Built the engine stander for our engine and Eddy current dynamometer.
- Currently installing the Eddy current dynamometer with graduate students.
- Future possibility of experimenting with torque, horsepower, RPM, EGR (Exhaust Gas Recirculation) and temperature measurements of the Kubota Diesel Engine after installation.
- Possibility of learning the engine tuning.

Research Assistant 06/2013 to 08/2013

Company Name " City , State

- Graphed sketches and figures for professor's Thermodynamics eBook.
- Learned how to use Smartdraw.
- Performed literature reviews on ongoing research topics and eBook materials.
- Added video links and real-world images to the eBook.

Program Assistant 05/2013 to 06/2013

Company Name " City , State

- Assisting Dr.
- Eischen, the director of the Hangzhou Engineering Study Abroad Program at Zhejiang University, during his program this coming summer.
- Helping with tasks such as translating, program activities, running errands, classes, transportation, and culture immersion.

2323 04/2013 to 10/2013

Company Name " City , State

- Designed Airplane Landing Gear by modeling with a mass-spring-damper SDOF system and designing the spring k and damper C that limits the given amplitude.
- Part 2

wew 10/2012 to 04/2013

Company Name " City , State

- Utilized MATLAB for statistical analysis of an elastic band rocket.
- Learned how to make experimental designs, statistical processes, statistics simulations, and graphical displays of data on computer workstations.
- Used statistical methods including point and interval estimation of population parameters and curve and surface fitting (regression analysis).
- Graphic Communications Project (3D design).

rer 10/2012 to 04/2013

Company Name " City , State

- Utilized SolidWorks to design a tape floss container.
- Developed the ability to use SolidWorks within the context of a concurrent design process to understand how everyday objects are designed and created.
- Emphasis placed on decision-making processes involving creating geometry and the development of modeling strategies that incorporate the intentions of the designer.

re 02/2009 to 04/2009

Company Name " City , State

- Visited construction sites with senior engineers.
- Kept record of site investigations.
- Dealt with paperwork with senior engineers and answered phone calls.
- Helped install residential wiring in new construction sites.
- Investigated electrical problems and developed the ability to read electrical diagrams and wire electrical panels.

Education

Master of science : Mechanical engineering Robotic & Manufacture Current Columbia University in the City of New York - City , State

Sep -2015 Dec Mechanical engineering Robotic & Manufacture

- Coursework in Advanced Mechanical Engineering
- Coursework in Drafting, Computer-Aided Design (CAD) and Computer-Aided Manufacturing (CAM)

Bachelor of science : Mechanical Engineering 1 2010 North Carolina State University, Raleigh (NCSU) - City , State

GPA: Magna Cum Laude GPA: 3.5 GPA: 3.63/4.0 Mechanical Engineering Magna Cum Laude GPA: 3.5 GPA: 3.63/4.0

North Carolina State University -

GPA: Magna Cum Laude Magna Cum Laude

#### Accomplishments

- Listed in the dean's list for three semesters during Junior and Senior Year Â· Chosen to be on the cover of NC State freshman admissions booklet Â· In the process of receiving the Professional Development Certificate Â· NCSU Chinese basketball team player.
- Math and physics club member Â· Control and Mechanical Team member of NCSU EcoCAR2 Â· Took the global training class at NC State University Â· CUSA member (Chinese undergraduate student association).

#### Skills

3D, 3D modeling, AutoCAD, broadcasting, budget, C, cable, Chinese, com, hardware, content, controller, data analysis, Dec, decision-making, designing, product design, English, fashion, focus, Fortran, frame, Graphic, Lathe, Linux, director, Maple, materials, MATLAB, mechanical, Mechanical Engineering, access, Mill, modeling, navigation, printer, processes, profit, speaking, Python, Quantitative analysis, reading, read, research, safety, Simulation, sketching, SolidWorks, statistical analysis, Statistics, phone, translating, transportation, video, Welding, wiring, written