Avi Bajpai

bajpai.a5340@gmail.com AviBajpai.com Brooklyn, NY 11211

Quirky Inc., New York, NY

Senior Design Engineer (2014 – Present)

- Lead engineer responsible for the development of several consumer products
- Expert abilities in Solidworks and Creo advanced surfacing
- Utilized Arduino skills and state of the art model shop to fabricate complex functional prototype
- Worked closely with industrial designers to develop product features and architecture
- Created works like/looks like prototypes and ran demonstrations during sales meetings
- Developed in depth knowledge of plastic and metal manufacturing processes
- Gained a strong understanding of design cost implications, margins, manufacturing costs, and market research
- Interfaced with partners, model shops, and manufacturing vendors to ensure design intent, schedule, and budget
- Panel member during weekly product evaluations

Pensa LLC, New York, NY

Design Engineer (2010–2014)

- Lead engineer responsible for the development of several patented award winning consumer goods
- Key contributor to the invention and development of market shifting products, including a new type of rapid prototyping machine and mobile solar charging station
- Led the interdisciplinary team responsible for the development of a more efficient beverage cooling and dispensing unit
- Worked closely with fabricators through the manufacturing of plastic and sheet metal components
- Created countless mock-ups and prototypes utilizing various 3D printers, CNC machining, and model makers
- Utilized basic programming and electrical skills
- Worked closely with clients and industrial designers to deliver quality final products

The Moto Development Group, San Francisco, CA

Mechanical Engineering Co-op

- Involved in the development of laptops, digital cameras, MP3 players, gaming systems, digital picture frames, and more
- Designed and constructed countless mock-ups and prototypes
- Ran performance tests on prototypes and existing products
- Worked closely with clients and industrial design firms as well as mechanical, electrical, and software engineers

## **COMPUTER SKILLS**

SolidWorks, Creo, Arduino, Processing, Excel, Ansys, AutoCAD, Keyshot, HSMWorks, MATLAB, C++, LabView, Final Cut Pro

## **EDUCATION**

Northeastern University, Boston, MA May 2010

Bachelor of Science in Mechanical Engineering

Significant Courses: ME Design, Intro to Product Design, Management Ops in a Tech Start-Up

Honors: Dean's Scholarship, Dean's List, 2009 Husky Hunt Champion

## Capstone II / Senior Honors Project

Co-Inventor of the patented ATLAS Bimanual Rehabilitation Glove

- Developed a smart glove to assist stroke patients in at home rehabilitation of fine motor skills
- Glove tracks hand position and finger bending in a virtual environment
- Northeastern University 2010 Research & Scholarship Expo 10 Winner

## **OTHER INTERESTS**

- Play multiple instruments, have made many short films, meditation, Kurt Vonnegut, hardware stores, Sci-Fi, my two cats
- assisted on building projects including a Nintendo PC, go-cart, soapbox derby car, firefighting robot, and bicycle carriage