Aman Ali Khan

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EDUCATION:

University of California, Berkeley ***B.S. Mechanical Engineering***
Expected Graduation Date: May 2017
Relevant Coursework:

Statics and Dynamics	Fluid Mechanics	Thermodynamics
Material Properties	Energy and Society	Microelectronic Circuits

TECHNICAL SKILLS:

- **Proficient** in Python, Matlab, Labview, Solidworks, AutoCAD, and LaTeX mark-up language
- **Experienced** with LEAN manufacturing practices and process improvement methods

EXPERIENCE:

Packd.org – *Product Engineer and Strategy Lead* *June 2015-present*
- Reduce campus over-crowding through start-up that provides real time occupation estimates of locations.
- Develop hardware enclosure in Solidworks that meets specific design constraints.
- Incorporate strategic elements to develop the future of Packd.

Berkeley Steel Bridge Team - *Machine Shop Lead and Solidworks Lead* *August 2013-present*
- Mentor 6 students in Solidworks to analyze properties of the bridge and facilitate machining.
- As Lead Engineer in machine shop, train a team of 10 students how to Mill, Lathe and use the CNC machine.
- Utilize innovative machining techniques to efficiently produce steel connections ranging from 1/16"–3/4" radius.

DSM Biomedical – *Mechanical Engineering and Manufacturing Intern* *June 2015-August 2015*
- Designed solutions to improve raw material transportation systems, process workflow and safety standards by identifying problems in manufacturing line.
- Coordinated with suppliers and internal operators to implement lasting changes in manufacturing process.
- Communicated original ideas and projects effectively to managers to institute proposed changes.

Vehicle-to-Grid Simulation Laboratory – *Researcher* *December 2014-May 2015*
- Verified accuracy of simulation backend by developing Arduino based GPS hardware and Python script.
- Produced documentation for hardware and feasibility report to expand usage to car and bus fleets.
- Improved vehicle journey data collection and UI by programming features relying on Google Map's API.

Tennis Dynamics Laboratory – *Research Assistant* *January 2014-September 2014*
- Conducted by Dr. Karl Hedrick, a former Chair of the UC Berkeley Mechanical Engineering Department, to determine the effects of impact shock and vibration on industry tennis rackets.
- Implemented a testing procedure involving data acquisition using National Instruments technology to determine the vibration of a specific manufacturer's tennis racket when compared to its competitors.
- Co-authored report to demonstrate the testing methods utilized to determine the "Peak Frequency" of a racket.

ACADEMIC PROJECTS:

Lever Arm Robot (Microelectronic Circuits) *Spring 2015*
- Prototyped and assembled a robot that responds to IR signals, using Op Amp processing and circuit elements.
- Programmed signal processing script in C and Python to perform functions dependent on IR signal length.

Object Transportation Design Project (Basic Engineering Design Graphics) *Fall 2014*
- Designed a system to transport 3 different types of balls from one area to another using a constrained budget and limited material base involving only rubber bands as a source of power.
- Developed a prototype in Solidworks that underwent refining for a final product which functioned as planned.

Deep Energy Retrofit Policy Memo (Energy and Society) *Fall 2014*
- Researched and crafted a policy memo on the topic of Deep Energy Retrofitting to present a number of cases where deep energy retrofitting was of benefit to a particular region.