

# ANGADBIR "SINGH" SABHERWAL

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[www.angadbir.com](http://www.angadbir.com)

LinkedIn Profile



## Strong and Diverse Educational Background

Iowa State University: Aug. 2012 – May 2016

B.S. Mechanical Engineering - GPA: 3.69

International Math Olympiad (IMO) 2011 World Rank 363

- Top 2% ISU class '13, ASHRAE Iowa Scholar, Dean's List, Tau Beta Pi
- Study Abroad, Zhejiang University-China, Germany & India
- ASME Engineering New Face Award, One of 12 students in nation

## Skill Building Work Experiences

**Siemens Product Lifecycle Mgmt. R&D Intern (Ames, IA) '16**

- Creating a virtual reality development software from scratch
- Develop prototype integration methods for TcVis

**Compressor Controls (CCC) R&D Intern (Des Moines, IA) '15**

- Generated flowcharts and algorithms for Compressor Performance Advisor (CPA) software module coded in Russian
- Gained understanding of turbomachinery system and controls in oil and gas, LNG, pharmaceutical, and petrochemical industry.
- Contributed to developing work process automation software using dynamic testing for decreasing workflow by 10%

**USG Corp. Project Engineer Co-op (Kansas City, MO) '15**

- Gained knowledge of paper mill, construction, valves, and piping
- Led installation of water softener systems-a \$250,000 project.
- Completed a proposal for the plant switchgear replacement (\$440,000) identifying critical breaker needs and space constraints
- Prepared and followed to completion all assigned capital authorities (>\$50,000) and job sheet requests (<\$50,000)
- Contributed in two Lean Six Sigma (Green Belt) projects to save at least \$250,000 in operations using DMAIC tools and RACI charts
- Trained and supervised external contractors on safety procedures. Led a 5S project reducing plant waste by 15%
- Determined MAWP of drying system using ASME Section VIII codes and prepared TIER II report (EPA regulation)
- Revised the Spill Prevention Control & Countermeasure (SPCC)

**Van Gorp Corp. Quality Engineer Intern (Pella, IA) '14**

- Compiled Level 1 instruction and training manual and received training in liquid penetrant, magnetic particle, ultrasonic testing
- Led a Six Sigma project (DMAIC, SIPOC) improving process efficiency by 15%, and reduced overtime labor costs
- Tested gage reusability and repeatability (R&R), time studies, along with calibration tests to improve accuracy by 15%
- Performed cost analysis, time studies and inspection procedures on pulley and conveyor systems to meet ISO 9001 standards
- Gained proficiency in statistical process control, weld engineering design, and coordinate measuring machines (CMM-Faro, Brown)

## Passionate Leadership

**Undergraduate Assistant, Indr. Assessment Centre, ISU '14-15**

- Conduct energy audits with team at manufacturing facilities

**Pro-Bono Consulting, Board of Director, Iowa State Daily '14-15**

- Guided a \$ 1,000,000 organization in financial decisions
- Handled personnel issues (hiring), compensation issues, seeking legal counsel, management of company's balance sheet and future outlook

**Undergraduate TA, Manufacturing Lab, ISU '14-15**

- Mentored students in welding, non-destructive testing, gage R&R, coordinate measuring machines, milling, CNC rapid prototyping, Mastercam x9, casting, gage R&R, flow analysis, and surface finishing
- Answered questions related to manufacturing from juniors and seniors in sessions of 25 students

**Research Assistant, Dept. of Mechanical Engineering '13**

- Observed patterns in trajectories of bacteria. Gained exposure to statistical modeling, and fundamentals of research

**Resident Assistant (Community Advisor) '13**

- Organized events, enforced university policies, and strengthened student experiences
- Mentored and advised the hall cabinet consisting of 56 residents. Serve as a role model and resource contact for 350 residents

**Undergraduate Assistant, Engr. Study Abroad '14**

- Collaborated with students and faculty for study abroad programs from ISU and universities across the world

## International Awards, Entrepreneurship

**18to25 Founder (18to25.com)**

Book and website on 25 youth entrepreneurs around the world

**ISU Homecoming Court, President's Leadership Award**

Selected as one of the 10 seniors, awarded the Sesquicentennial Award

**Global Hesselbein Leadership Summit, Pittsburgh**

Selected as one of the top 50 student leaders in the world (top 25 in USA)

**United Nations Youth Achievement Recognition**

Recognized as one of the 10 youth (16-18 year old) across the world at UN Headquarters in New York for leadership, and exceptional service

**Design Project-Waste Shredder Philippines**

Aimed to alleviate the issue of trash mountains in Philippines

## A Winning Combination of Skills

### Technical Skills

- Lean Six Sigma, DFMEA
- 5S, Project Management, NDT
- Gage R&R, Turbomachinery
- Coordinate Measuring, P&ID
- Ultrasonic, Magnetic Particle
- Algorithms, Flowcharts, GD&T
- Supply chain, HVAC, EHS

### Software

- Mastercam X9
- Solidworks, Autocad
- MATLAB, C++, HTML
- Calypso, Faro CAM2
- Statistical Process Control
- Visual Basic, SAP
- JMP, Data Mining

### Soft Skills

- Golf, Public Speaking, Badminton
- Basic French and Mandarin
- Hindi, Punjabi, German
- Consulting, Cooking, Cricket
- Networking/Volunteering
- Sales and Pitching, Guitar
- Classical Music, Fencing, Archery

## My Portfolio

