

## EDUCATION

- 2015 – Pr.      **NORTHWESTERN UNIVERSITY**      **Evanston, IL**  
McCormick SCHOOL OF ENGINEERING  
Masters in Engineering Management
- 2006 - 08      **ILLINOIS INSTITUTE OF TECHNOLOGY**      **Chicago, IL**  
ARMOUR COLLEGE OF ENGINEERING  
Bachelor of Science in Mechanical Engineering  
Co-operative Engineering Education Certificate
- 2004 - 05      **HAROLD WASHINGTON COLLEGE**      **Chicago, IL**  
Pre-Engineering Courses

## PROFESSIONAL EXPERIENCE

- 2009 - Pr.      **Fauske and Associates LLC. (FAI)**      **Burr Ridge, IL**  
Senior Mechanical Engineer  
*FAI is a world leader in Nuclear and Chemical process safety, founded in 1980. FAI has been a wholly owned subsidiary of Westinghouse Electric Company (WEC) since 1986.*
- Lead in establishing multiple new revenue streams as part of a division wide business diversification effort. Business diversification efforts were initiated due to sector contraction and loss of revenue. Businesses included a testing laboratory for a set of test methods identified as business opportunities and developing aerosol transport technology applications to overcome a 5% revenue loss.
  - Organized teams for business collaboration, innovation, and development activities. Established new organization level procedures, standards, and multiple other team benefiting metrics leading to improved productivity. Efforts were part of concerted organization development and business diversification efforts.
  - Led successful team of 8 multi-disciplinary professionals and coordinated between multiple teams of other professionals tasked with identifying root cause of mechanical failures in a critical plant system following \$20 million plant upgrade. Saved customers approximately \$14 million in downtime costs through design, setup, and execution of analysis and experiments determining cause of anomalies at Swedish nuclear facility.
  - Authored patent US 20140054429 A1, a retrofit device for measuring Nuclear Power Plant piping vibrations in conditions of extreme heat and radiation, where conventional sensors failed.
  - Authored and verified durability of piping networks following abnormal plant operation leading to system failures and personnel safety concerns for new generation Nuclear Power Plants. The calculations were used to design proper supports to limit damage to systems and alleviate safety concerns for regulator approval.
  - Pivotal member of 10-person team, tasked with simulating and analyzing Fukushima Daichi Nuclear Power Plant accident after 2011 earthquake and tsunami. 5-year project included model development and analysis using severe accident simulation code MAAP. Results gave plant owners insights on state of plant systems.
  - Coordinated procurement, setup, testing and reporting of testing campaigns, over 3-year span, for multiple Power Plant Operators to ensure unintended system failures are avoided following varying sizeable investments, 10's to 100's of millions, by clients on plants upgrades. Regulator mandated testing for approval of upgrades. Test team included engineers, universities and technicians.
- 2007 - 08      **Gamma Technologies Inc.**      **Westmont, IL**  
(GTI) Engineering Intern  
*GTI is the global leader in vehicle simulation software and offers the industry standard in "virtual vehicle/powertrain", for integrated simulations of entire vehicles.*
- Completed cooperative education program project to implement a new feature in GTCrank software package. New feature enables fatigue analysis of an engine Crankshaft using EFR stresses and FEA as input.
  - Collaborated with software engineers and application engineers to enhance overall GTSuite software Graphical User Interface.

## INITIATIVES & ACHIEVEMENTS

- 2012 - 13      Mentored and tutored Adult Basic Education for job seekers at the Jane Adams Resource Corporation
- 2007 - 08      Co-organized a blanket drive for orphaned children in Korea with members of the Rotaract Club at IIT