

# KAMYIN CHENG

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## EDUCATION

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### Northwestern University

Evanston, IL

*M. S. in Engineering Design & Innovation*, 09/2013 – 12/2014 (Expected)

### Massachusetts Institute of Technology

Cambridge, MA

*B. S. in Mechanical Engineering*, 09/2006 - 06/2010

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## EXPERIENCE

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### NUvention Medical Innovations, Northwestern University

Evanston, IL

Hardware Design Engineer, 09/2013-present

- Work with team of 9 students from law, medicine, business, and engineering school to introduce new medical innovation. Observe medical settings, interview medical professionals, synthesized findings and identified need opportunities.
- Lead brainstorming activities, provided engineering recommendations to ensure product feasibility, and developed iterative prototypes. Designed wearable mechatronic device that performs data acquisition, communication, and processing.

### GE Healthcare

Greater Milwaukee, WI

Mechanical Design Engineer, PET/MR Hardware Team, 09/2012 – 08/2013

- Introduced new power cabinet from ground up for a high profile NPI program. Designed, prototyped, and staged production release for major electro-mechanical components including power cabinet, 5 sheet metal power chassis enclosures, internal cable harnesses, fiber optics communications subsystem, and leak detection subsystem.
- Architected power cabinet chassis layout, defined appropriate mounting mechanism for each component, calculated center of gravity and approximate weight, and predicted thermal performance in preparation of vibration and temperature testing.
- Facilitated design reviews, leveraged external supplier expertise and internal resources to optimize robust design for reliability, manufacturability, and serviceability. Collaborated with cross-functional teams to drive rigorous milestone completion dates.
- Managed regular meetings with multiple national suppliers to drive product verification and validation activities.
- Mentored summer intern through challenging, fast-paced assignments in cable harness design for integrated PET-MRI system.

### GE Healthcare

Greater Milwaukee, WI & Greater Boston, MA

Edison Engineering Development Program, 07/2010 – 09/2012

Extensive 2-year technical and leadership training program consists of 4 rotational assignments and significant trainings.

Mechanical Design Engineer, PET/MR Hardware Team, 02/2012 – 09/2012

- Delivered near production fluid cooling subsystem design for solid state PET detector modules. Identified design constraints, benchmarked existing technologies, proposed design concept using CAD, calculated pressure loss and heat transfer performance to support design decisions, and procured engineering prototype for testing.

Mechanical Engineer, Specialty MR Engineering Team, 07/2011 – 02/2012

- Designed, structured, and released mobile collector kit for system upgrade. Assisted in system mechanical installation at mobile van supplier site, implemented service fixture to improve site installation process, introduced part verification testing procedures. Aligned engineering tasks with program schedule, procured resources to drive product verification and validation activities.

Mechanical Design Engineer, Life Support Solution Wireless Team, 01/2011 – 07/2011

- Developed assembly fixture to increase product manufacturability. Obtained inputs from manufacturing, introduced assembly workflow, and proposed assembly fixture that reduces production time by 25%.

Reliability Engineer, MR Patient Handling Team, 07/2010 – 01/2011

- Implemented reliability testing for MR GEM450W patient table and proposed test procedure to meet reliability goal. Analyzed part failures from testing and identified root causes with engineering team to implement design corrections.
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## SKILLS

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Software: Pro/Engineer, SolidWorks, ANSYS, Mathcad, MATLAB, Visio, MiniTab, Adobe Creative Suite, HTML/CSS

Language: Mandarin, Cantonese, English