

# Shaojie Yang

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## EDUCATION

- University of Cincinnati, Cincinnati, Ohio** **2020(expected)**  
*Master of Science in Mechanical Engineering*
- University of Cincinnati, Cincinnati, Ohio** **2017**  
*Bachelor of Science in Biomedical Engineering*

## RESEARCH EXPERIENCE

- NSF I/UCRC Center for Intelligent Maintenance Systems,** **Feb 2020-present**  
**University of Cincinnati CEAS, Cincinnati, Ohio**  
*Graduate Researcher*

- Work on data-driven prognostics and health management (PHM) methodologies for industrial applications
- Collaborate with other researchers to deliver solutions for industrial challenges

- Vibro-Acoustic & Sound Quality Research Laboratory,** **2016-2017**  
**University of Cincinnati CEAS, Cincinnati, Ohio**  
*Undergraduate Researcher*

- Performed a literature review focusing on active noise control in vehicles
- Tested software prototype code
- Attended Hypoid Bevel Gear Consortium meetings

- Laboratory for Energy Materials and Nano-Biomedicine**  
**Kalinichenko Lab** **2016-2017**  
**University of Cincinnati CEAS, Cincinnati, Ohio**  
*Undergraduate Researcher*

- Assisted with the development of phospholipid-modified polyethylenimine-based nanoparticles for gene delivery
- Assisted in setting up various projects and completing all the necessary paperwork

- Medical Device Innovation & Entrepreneurship Program, Cincinnati, Ohio** **2014-2014**  
*Undergraduate Researcher*

- Assisted graduate student with a research project focused on arterial oxygenation
- Utilized SolidWorks to design a compression mold for membranes

- University of Cincinnati CEAS, Cincinnati, Ohio** **2013**  
*Undergraduate Researcher*

- Performed a literature review focusing on the use of algae for biodiesel
- Compiled findings from hundreds of scientific papers
- Prepared and presented findings weekly to assist in determining future research directions

## PROFESSIONAL EXPERIENCE

- Bodycote, Greensburg, Indiana** **2015**  
*Lab Technician*

- Assisted with non-confirming product management
- Performed metallographic examination of automotive components
- Assisted with SPC tracking
- Managed process improvement projects
- Reviewed TS 16949 quality maintenance

- Cincinnati Sub-Zero, Sharonville, Ohio** **2014**  
*Quality Co-op*

- Performed CPU Board testing
- Performed Cold Therapy pad testing

- Reviewed and packaged blankets for biocompatibility testing
- Scanned and filed inspection records and history records
- Organized QRB meeting minutes and slide preparation
- Created Label Template
- Checked and searched range of gauges used at production
- Reviewed RoHS, DHAs, and International Standards documents
- Performed instruction reverse number lookup

**AssureX Health, Mason, Ohio**

**2014**

**Science Co-op**

- Performed literature review and presented findings to the Science Team resulting in a company-win change in the understanding of a genotype
- Modeled metabolism of drugs using Visio for the GeneSight product
- Performed new literature review on QTc prolongation and presented findings to the Science Team resulting in elimination of QTc prolongation from product consideration
- Reviewed 150,000 lines of data and removed inconsistent values
- Developed prototype database and flow chart for improved efficiency in analyzing clinical study data. Prototype handed-off to Product Development Team for coding and integration into internal systems
- Investigated available genomic databases for relevant data characteristics

**PUBLICATIONS**

**Yang S**, Li X, Jia X, Wang Y, Zhao H, Lee J. (2020). Deep Learning-Based Intelligent Defect Detection of Cutting Wheels with Industrial Images in Manufacturing. *Procedia Manufacturing*, 2020, **48**:902-907.

Wang, Y, Jia X, Li X, **Yang S**, Zhao H, Lee J. (2020). A Machine Vision Based Monitoring System for the LCD Panel Cutting Wheel Degradation Assessment. *Procedia Manufacturing*, 2020, **48**:49-53.

Li X, Jia X, Wang Y, **Yang S**, Zhao H, Lee J. (2020). Industrial Remaining Useful Life Prediction by Partial Observation Using Deep Learning with Supervised Attention. *IEEE Transactions on Mechatronics*.

Lee J, Li X, Xu Y, **Yang S**, Sun K. (2020). Recent Advances and Prospects in Industrial AI and Applications. *ACTA Automatic Sinica*.

**UNIVERSITY AND COMMUNITY SERVICE**

**Cincinnati Children's Hospital, Cincinnati, Ohio**

**2013-2014**

**Child Life Bedrest Volunteer**

- Provided bed-side assistance to pediatric patients by delivery toys and activities and providing company to children

**Cincinnati Computer Cooperative, Cincinnati, Ohio**

**2011-2013**

**Volunteer**

- Tested and inspected computer components
- Helped with training and customer service

**RELEVANT SKILLS**

- **Technical Skills:** Machine Learning, Deep Learning
- **Programming Languages:** MATLAB, Python
- **Soft Skills:** Problem Solving, Strong Attention to Details, Work Well Individually & Within A Team