

# Kurt C. Jacobson

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## EDUCATION

### Kennesaw State University, Marietta, Georgia, USA

- B.S. in Mechanical Engineering Technology Aug 2013 – Dec 2016
  - Cumulative GPA: 4.0 / 4.0
  - Focus: Manufacturing, Engineering Graphics
- Minor in Nuclear Engineering Jan 2015 – Dec 2016

## RESEARCH EXPERIENCE

### Center for Nuclear Studies, Kennesaw State University

- Undergraduate Research Project Jun 2016 – Apr 2017
  - Project: Alpha Radiation Detector Development And Testing Under Various Conditions
  - Supervisors: Dr. Eduardo B. Farfan and Dr. Sandip Das
  - Focus: Development of a precise and low-cost Chang-Rosenblum type alpha particle detector.
  - Presented at the National Conference on Undergraduate Research, University of Memphis, Apr 6-8, 2017

## WORK EXPERIENCE

### Kennesaw State University, Marietta, Georgia, USA

- Laboratory Manager, KSU Center for Nuclear Studies Dec 2015 – Apr 2017
  - Managed liquid nitrogen supply for nuclear lab, including ordering and coordinating delivery.
  - Maintained five state-of-the-art radiation detectors and all associated equipment.
  - Tracked usage and maintained inventory of more than 25 radiation sources.
  - Coordinated and ran 4-8 undergraduate reactor simulation labs per semester (Spring, Summer, Fall).
- Student Assistant, KSU Department of Mechanical Engineering Jan 2016 – Dec 2016
  - Graded all homework and tests for multiple upper level Mechanical and Nuclear Engineering courses.
  - Presented and promoted the Nuclear Engineering lab on multiple occasions to industry and university boards.
  - Set up equipment and assisted instructors in running the Radiation Detection and Measurement labs.
- Supplemental Instruction Leader, Southern Polytechnic College of Engineering Aug 2015 – Dec 2016
  - One of the first to offer Supplemental Instruction (SI) for upper level engineering courses at KSU.
  - Developed worksheets and created and maintained a website to aid in presenting material to struggling students.
  - Enhanced student learning, improved grades, and greatly reduced attrition rate within the Strength of Materials course.

### Tubular Fabrication LLC, Flowery Branch, Georgia, USA

- Lead Mechanical Engineer May 2015 – Aug 2015
  - Developed a novel, semi-automatic, pneumatically actuated, precision large-bore chuck.
  - Created dedicated, easy to use, interactive software for calculating cut path trajectory.
  - Fabricated a functional prototype and tested in production environment.
  - Achieved significantly increased accuracy of notches, and reduced cycle times by more than 75%.

## AWARDS & SCHOLARSHIPS

- President's List, Fall 2013 through Fall 2016, Kennesaw State University 2013 – 2016  
Awarded each semester for maintaining an overall GPA of 4.0.
- Clarence Arnston Award, KSU Mechanical Engineering Technology Department Dec 2016  
Awarded for Outstanding Senior in Mechanical Engineering Technology in the year 2016.
- Engineering Technology Student of the Year, Georgia Engineering Alliance Feb 2016  
Awarded at the Georgia Engineers Week Awards Gala.

## PROFESSIONAL AFFILIATIONS & ACTIVITIES

- American Nuclear Society, Professional Member Feb 2017 – Present
- Kennesaw Nuclear Society, Vice Present Jan 2016 – Dec 2016
- Society of Manufacturing Engineers, Student Member 2016 – Present
- American Society of Mechanical Engineers, Student Member Oct 2015 – Present

## PROFESSIONAL CERTIFICATIONS

- Certified Manufacturing Technologist, Society of Manufacturing Engineers Dec 2016 – Dec 2019
- Certified SolidWorks Associate, DS SolidWorks Corporation Nov 2014 – Jan 2018

## SKILLS

Python, Solidworks, MATLAB, NI LabVIEW, Microsoft Word, Microsoft Excel, Microsoft PowerPoint.

## INTERESTS & HOBBIES

Precision Machining, Industrial Automation, Open Source Software, Linux, Woodworking, Hiking