



# Jonathan Young-jin Kim



(213) 605-2607

jonathan.kim424@gmail.com

## About Me

Detailed oriented, highly motivated Mechanical Engineer with over 4 years of experience in systems validation testing and hardware and calibration development for propulsion systems. Strong leadership and communication skills with a focus on cross-functional teamwork and emphasis on improving and documenting best testing practices. Proficient in working efficiently in fast-paced environments with limited time and resources.

## Experience

### General Motors – Lead Development Engineer

2018 – Present

- Improved test DOE matrix and leveraging virtualization to reduce test timing by up to 20%
- Supported and created best practice test procedures for emerging engine technologies
- Communicated and established handshake requirements between hardware and calibration teams
- Executed tests according to internal and government required certification
- Improved L3B gas engine fuel efficiency by 12%
- Identified limitations in the test engine to facility dyno interface and implemented a new build process, improving test efficiency by 30% for impacted tests

### General Motors – Validation Engineer

2017 - 2018

- Created and executed engine hardware validation test plans
- Performed data and failure analysis
- Created and presented failure reports before multiple groups for review
- Overhauled Start/Stop hardware durability testing lab, identified safety issues, and standardized test implementation improving test efficiency by 15%
- Performed validation testing to isolate engine oil cooler hardware failure, participated in failure review board, and completed validation testing of the final design

## Technical Skills

- Certified Six Sigma – Black Belt
- Skilled with
  - MATLAB
  - SolidWorks, NX
  - AVL INCA, PUMA, CONCERTO
  - LabView
- Strong foundation with Java, Python, Visual BASIC, HTML
- Experienced with machine shop tools, machinery, and processes
- Proficient in Microsoft Word, Excel, PowerPoint

## Education

**Bachelor of Science,  
Mechanical Engineering**  
The University of Texas at El Paso,  
Graduated 2016  
**GPA: 3.72**

**Studied Bachelor of Science,  
Aerospace Engineering**  
Cockrell School of Engineering  
The University of Texas at Austin, 2010-2014

### Related Courses

Engineering Communication, Student Leadership Seminar,  
Thermodynamics, Engineering Computation, Engineering Design  
Graphics, Mechanical Design, Manufacture Engineering

