

Matthew Rothfuss

<http://matthewrothfuss.me>
 mreng@ksu.edu | (785) 260-0206

EDUCATION

KANSAS STATE UNIVERSITY

B.S. IN PHYSICS

Grad. May 2016 | Manhattan, KS
 College of Arts and Sciences

ABILENE HIGH SCHOOL

Grad. May 2007 | Abilene, KS

LINKS

Github:// **Kovrinic**
 LinkedIn:// **mrothfuss**
 Twitter:// **@Rothfuss212**

COURSEWORK

UNDERGRADUATE

Introduction to Quantum Mechanics

(PHYS 662)

Thermodynamics And Statistical Physics

(PHYS 664)

Applied Optics And Optical

Measurements

(PHYS 652)

SKILLS

PROGRAMMING

Experienced:

LabVIEW • Python

Familiar:

SQL • IBM AS/400

Shell • \LaTeX • Matlab

JavaScript • HTML • C++

DESIGN

Photoshop • GIMP

AutoCAD • ProE/Creo • LibreCAD

PLATFORMS

Linux • Windows • OS X

AWARDS

- 2011 James A. Branson Memorial Scholarship
- 2007 Louis Armstrong Jazz Award
- 2007 Kansas Scholars Curriculum
- 2005 Eagle Scout

SOCIETIES

- 2007 National Honors Society

EXPERIENCE

LAND PRIDE | ROUTING PERSON

November 2016 - Present | Salina, KS

- Fabrication and Welding routing
- Parts per hour and material usage calculations
- ProE/Creo, AutoCAD, and IBM AS/400 experience

KANSAS STATE UNIVERSITY | ASSISTANT SCIENTIST

June 2014 - May 2015 | Manhattan, KS

- Designed and created a bench-top Plate Heat Exchanger (bPHE)
- Restored a supercritical fluid extraction (SFE) system
- Development (fabrication, LabVIEW front/back end code) of an in house Ultrasonic Flaw Detector

KANSAS STATE UNIVERSITY | RESEARCH ASSISTANT

August 2011 - May 2012 | October 2010 - May 2011 | Manhattan, KS

- Improved/updated **Kansas Light Source (KLS)** LabVIEW diagnostics monitoring program.
- Created a LabVIEW diagnostics monitoring program for the **High Intensity Tunable Source (HITS)**.
- Participated in research and maintenance for the KLS & HITS laser labs.

LAND PRIDE | ASSEMBLY LINE WORKER

May - August (2011 & 2010) | August 2008 - August 2009 | Abilene, KS

- Memorized assembly of products, optimized stations for efficiency, and worked with pneumatic tools
- Maintained a high standard for quality, and trained station workers

RESEARCH

KSU ANIMAL SCIENCES AND INDUSTRY | RESEARCH ASSISTANT

September 2015 - May 2016 | Manhattan, KS

Worked for **Dr. Jayendra Amamcharla** to develop LabVIEW libraries for an Olympus EPOCH LTC Flaw Detector for data collection and analysis.

KSU JAMES R. MACDONALD LABORATORY | RESEARCH ASSISTANT

October 2010 - May 2012 | Manhattan, KS

- Worked for **Dr. Vinod Kumarappan** in the KLS laser lab, updating LabVIEW diagnostics monitoring program and supported grad students **Varun Makhija** and **Xiaoming Ren** in their research.
- Worked for **Dr. Carlos Trallero** in the HITS laser lab, creating a secondary LabVIEW diagnostics monitoring program and providing general lab support.
- Duties included creating small electronics, beam path maintenance, handling photo detectors, optical equipment, LabVIEW coding, data collection and analysis.