Matthew Rothfuss

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EDUCATION

KANSAS STATE UNIVERSITY
B.S. in General 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)
Introduction To Optics (PHYS 651)
Electromagnetic Fields 1 (PHYS 532)
Mechanics (PHYS 522)
Introduction To Complex Analysis (MATH 630)
Topics In Physics (Programming/Numerical Methods) (PHYS 707)

SKILLS

PROGRAMMING
Experienced:
LabVIEW • Python
Familiar:
Shell • LaTeX • Matlab
JavaScript • C++

DESIGN
Photoshop • LibreCAD

EXPERIENCE

KANSAS STATE UNIVERSITY | Assistant Scientist
June 2014 - May 2015 | Manhattan, KS

- Development of Olympus EPOCH LTC Flaw Detector LabVIEW libraries for data collection and analysis.

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, worked with pneumatic tools
- Maintained a high standard for quality, and trained many station workers

RESEARCH

KSU ANIMAL SCIENCES AND INDUSTRY | Research Assistant
September 2015 – May 2016 | Manhattan, KS

Worked with Dr. Jayendra Amamcharla and Mary Hauser to create an ultrasonic flaw detector to test dairy solubility. Dr. Amacharla also had me design and create a bench-top Plate Heat Exchanger (bPHE), as-well-as restore a supercritical fluid extraction (SFE) system.

KSU JAMES R. MACDONALD LABORATORY | Research Assistant
October 2010 – May 2012 | Manhattan, KS

- Worked for Dr. Vinod Kumarappan in KLS laser lab, updating LabVIEW diagnostics monitoring program and supported grand students Varun Makhija and Xiaoming Ren in their research.
- Worked for Dr. Carlos Trallero in 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.

AWARDS

2011 James A. Branson Memorial Scholarship
2007 Louis Armstrong Jazz Award
2007 Kansas Scholars Curriculum

SOCIETIES

2007 National Honors Society