

Jonathan McLinn

jonathanmclinn@gmail.com • 16301 Napa Cir, Edmond, OK 73013
(405) 219-2137 • <http://mclinn.info> • US Citizen

I am looking to actively participate in developing challenging technical solutions in an engaging team environment. I want to develop my skills through good communication and a willingness to learn.

Python, MATLAB, SQL, Pro/E, LabView, NASTRAN, PATRAN, HTML/CSS/JS, PHP, NoSQL, Lisp, Microsoft Office

- FE Exam (EIT) completion April 2012
- Hardware design and implementation
- Software tool creation and algorithm design
- Technical team leadership experience
- Data acquisition, analysis, and presentation
- Test procedure development and execution

UNIVERSITY OF ROCHESTER

MS Technical Entrepreneurship and Management – Simon School of Business Admin May 17, 2015

- Product Development, Economics of Competitive Strategy, Technology Screening, New Venture Management
- Computer Science Concentration – Dynamic Language Development, Logical AI Foundations, Database Systems

BS Mechanical Engineering – Hajim School of Engineering May 20, 2012

- Fluid Mechanics, Solid Mechanics, Material Science, Mechanical Design, Thermodynamics, Heat and Power
- 3.52 / 4.00 GPA – graduated with Distinction – Dean's List 5 semesters

UNIVERSITY OF ROCHESTER MECHANICAL ENGINEERING DEPARTMENT

Turbulence and Complex Flow Group 2014-2016

- Developed software tool for mapping/visualizing oceanographic data to distinct needs of lead investigator
- Customized outputs for distinct input data and desired map projection, improving timing from existing methods
- Results used in scientific publications. Program also allowed for time-lapse video creation

Research Assistant 2016

- Worked with new faculty members to design their research and course websites with unique update platforms

OPTIMAX SYSTEMS, INC.

Development of Upgraded Calibration System 2012

- Researched and tested advanced calibration methods over existing process, reducing noise an order of magnitude
- Devised implementation and system operation. Programmed necessary procedures for data collection and analysis

Design and Fabrication of Manufacturing Hardware 2012

- Coordinated with Manufacturing to design for easy integration and sustained use, machining final prototype device
- Evaluated performance and documented/presented results, doubling cooling efficiency across product range

INDEPENDENT PROJECTS

Optical Polishing Computer Modeling Software 2016

- Programmed algorithm to model optical polishing. Meant to improve error isolation in optical manufacturing R&D
- Theoretically allows for optimization of polishing operations, or discovery of potential instrumentation error

SELECT ACADEMIC PROJECTS (University of Rochester)

Liquid Damping Test & Analysis (with Laboratory for Laser Energetics) 2012

- Isolated several key factors controlling liquid damping on cryogenic fusion targets to reduce vibrations
- Created scaled models and test procedures, collecting data to explore effectiveness of several damping variables
- Analyzed ring-down vibration data, evaluating how results could be applied within cryogenic fusion chamber

Head Teaching Assistant & Course Redesign (Engineering of Bridges ME course) 2009-2011

- Led a team of assistants for two years in the daily operation of a college course: workshops, labs, projects, etc.
- Implemented integration of new bridge modeling capabilities, directing purchasing and project development

Roman Concrete Property Synthesis (aiding doctoral research FEA analysis) 2011

- Replicated Roman Concrete material properties, testing to ASTM standards with modern materials for rapid curing

Market Fit and Development Analysis of New Audio Technology 2014-2015

- Consulted with inventor to devise a development plan with market and growth analyses, presenting final proposal