# **Nathaniel Price**

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### **Education**

2016	Joint Ph.D. Mechanical Engineering Gainesville, Florida, US and Saint-Étienne, Rhône-Alps, France	University of Florida École des Mines de Saint-Étienne
2014	Graduate Certificate in Scientific Computing Gainesville, Florida, US	University of Florida
2014	M.S. Mechanical Engineering Gainesville, Florida, US	University of Florida
2012	<b>B.S. Mechanical Engineering</b> Gainesville, Florida, US	University of Florida

# **Select Projects**

## Project 1: Web-based data analysis application

Nebraska Game and Parks Commission

Employer(s): University of Nebraska-Lincoln

Language(s): R, SQL, Linux

Skills: exploratory data analysis, interactive visualization, data wrangling

- Developed and deployed application for exploratory data analysis of SQL customer database
- Advanced data filters, interactive graphics, customize and export plots, download data summaries

#### Project 2: Buying behavior of Nebraska hunters and anglers

Nebraska Game and Parks Commission

Employer(s): University of Nebraska-Lincoln

Language(s): SQL, R

Skills: generalized linear models, maximum likelihood estimation, simulation-based model checking

- Developed novel statistical method for analyzing repeat-purchase data
- Applied method to predict purchasing behavior of 1.2 million anglers with individual-level granularity

# Project 3: Optimal sounding rocket design under uncertainty

ONERA - The French Aerospace Lab

Employer(s): University of Florida, ONERA

Language(s): Matlab

Skills: optimization, machine learning (e.g., Gaussian process), Monte Carlo simulation

- Developed method to tradeoff between expected design performance and risk of future redesign while achieving target reliability
- Applied method to conceptual design of a sounding rocket to reduce gross lift off weight while achieving target altitude

## Project 4: Effects of patient variability on safety of a medical implant

Biomet

Employer(s): University of Florida

Language(s): Python

Skills: numerical methods, finite element analysis

- Created model to predict sternum displacement given patient variability (e.g., bone strength) and implant design (e.g., screw length)
- Awarded Biomedical Engineering Society Design and Research Award and Knox T. Millsaps Outstanding Undergraduate Paper Award

#### **Employers**

2016 - present	Data Scientist / Post-doctoral Research Associate, University of Nebraska-Lincoln, Lincoln, Nebraska,
	US .
2014 - 2016	Ph.D. Student Researcher, ONERA - The French Aerospace Lab, Palaiseau, Île-de-France, France
2012 - 2016	Graduate Research Assistant, University of Florida, Gainesville, Florida, US
2011 - 2012	Undergraduate Research Assistant, University of Florida, Gainesville, Florida, US
2010 - 2011	Launch Engineer Intern, SpaceX, Cape Canveral, Florida, US
2009 - 2010	Undergraduate Research Assistant, University of Florida, Gainesville, Florida, US
2005 - 2010	Engineer Intern, E&S Consulting, Inc., St. Augustine, Florida, US