

# Steven J. Lanham

Phone: (801) 678-4509

Email: sjlanham@umich.edu

---

## Education

**University of Michigan**, Ann Arbor, MI, *(Sept 2015 – Present)*

- PhD Chemical Engineering student

**Brigham Young University**, Provo, UT

- **B.S. Chemical Engineering**, April 2015, Overall GPA: 3.96/4.0
  - Heritage Scholarship (full tuition, 4 years)
- 

## Research Experience

**Graduate Student Research Assistant**

**Computational Plasma Science and Engineering Group** *(Oct 2015 – Present)*

Advisor: Prof. Mark J. Kushner

- Working on low temperature pulsed plasmas for material processing

**Undergraduate Research Assistant**

**Catalysis Lab Group, BYU Chemical Engineering** *(Feb 2014 – Aug 2015)*

Advisor: Prof. William Hecker

- Operational management of fixed-bed reactor system running the Fischer-Tropsch process (conversion of syngas to hydrocarbons)
  - Experience using gas chromatography to characterize products
  - Managing reactor transitions, supervising and training several students
  - Troubleshooting process problems and implementing solutions
- Developed kinetic models for the Fischer-Tropsch main reaction and deactivation on both the macro and micro scale using Matlab, Visual Basic, C++, and R statistical software

**Computational Reacting Flows Research Group, BYU** *(Dec 2014 – Aug 2015)*

Advisor: Prof. David Lignell

- Developing synthetic turbulent model with correlated fields (temperature, mixture fraction, etc.) for DNS initialization
  - Worked on extending one dimensional turbulence model data into three dimensions
- 

## Awards and Professional Societies

- Outstanding Junior Award, Outstanding Senior Award – BYU Chemical Engineering
  - Tau Beta Pi Honor Society
  - Phi Kappa Phi Academic Honor Society
  - Eagle Scout (Boy Scouts of America)
-