

## EXPERIENCE

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### **OpenX, Senior Data Scientist** *Pasadena, CA* (2015-Present)

- Design, prototype, and deploy a variety of machine-learning models to support OpenX's programmatic advertising marketplace
- Produce analyses and visualizations to solve business problems and provide new insights

### **Caltech, Senior Postdoctoral Scholar - LIGO** *Pasadena, CA* (2010-2015)

- Contributed to the first direct detection of gravitational waves
- Led a working group of about 13 participants in a large scientific collaboration
- Organized and managed a large scale data science project involving 16 geographically dispersed researchers, resulting in several publications

### **University of Wisconsin-Milwaukee, Research Associate** *Milwaukee, WI* (2007-2010)

- Pioneered advanced statistical methods in the search for gravitational waves
- Developed early universe simulation that performed 10x fast than the state-of-the-art

## SKILLS

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### **Technical**

- Python, SQL, C/C++, Java, Hadoop (MapReduce, Hive), D3.js, TeX/LaTeX
- Bayesian and frequentist methods for Regression, Classification, and Clustering
- Neural Networks/Deep Learning, Trees, Bandits
- Principal Component Analysis, A/B testing, Time Series, Feature Engineering
- Unix, Linux
- Aptitude for quickly grasping new concepts in unfamiliar fields

### **Leadership**

- Demonstrated ability to manage a diverse team at different career levels
- Oversee multiple projects and meet deadlines

### **Communication**

- Excellent written and public speaking skills evidenced by publications and invited talks at international conferences
- Ability to present complex ideas in a clear and concise manner to a wide range of audiences across engineering, business and product

## AWARDS

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**Breakthrough Prize** (2016), For the first direct detection of gravitational waves

**Gruber Prize in Cosmology** (2016), For the first direct detection of gravitational waves

## EDUCATION

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**University of Florida** *Gainesville, FL* (2002-2007), PhD, Physics

**Reed College** *Portland, OR* (1997-2001), BA, Physics