

# Ian K. Eaves

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## Education

### Drexel University

MASTERS OF SCIENCE (ABD), PHYSICS

Philadelphia, PA

Sept. 2011 - Dec. 2014

### Baylor University

BACHELORS OF SCIENCE, PHYSICS, MINOR IN MATHEMATICS

Barry M. Goldwater Scholar • Honors College Member • Dean's List • Elected Student Senator

Waco, TX

Sept. 2007 - May. 2011

## Experience

### Grai

FOUNDER

Madison, WI

July 2021 to present

- Founded Grai, an open-source platform that simplifies the management of complex data systems.
- Directs a global team to develop and maintain the platform, with users from companies like Roblox, Remax, and Axios.
- Spearhead all aspects of early-stage company development, including fundraising, marketing, and product strategy.
- Successfully secured venture backing from investors like Y Combinator.

### Centene

LEAD MACHINE LEARNING ENGINEER

St. Louis, MO

Jun. 2019 - July 2021

- Lead machine learning engineer for the NextGen and population health initiatives at Centene, a Fortune 50 healthcare company.
- Architected and oversaw implementation of novel internal machine learning deployment platform.
- Guided a cross-functional team to develop new technologies which improved healthcare data system operations and accessibility.
- Mentored junior team members, fostering professional growth and technical excellence.

### CiBO Technologies

LEAD DATA SCIENTIST

St. Louis, MO

May 2018 - May 2019

- Directed a team at CiBO Technologies to develop data tools that improved agricultural system modeling and analysis.
- Built machine learning models to predict rainfall distribution and enhance environmental understanding at the field level.
- Created software solutions to refine agricultural data quality used in forecasting crop growth patterns.
- Led company consulting efforts with fortune 500 agricultural clients to improve crop yield and quality.

### Bayer

DATA SCIENTIST

St. Louis, MO

Feb. 2017 - May 2018

- Member of Bayer's consumer behavior team responsible for addressing farmer needs through data-driven insights.
- Developed models to forecast customer demand, guiding sales strategies and marketing resource allocation.
- Built software responsible for allocating 10's of millions of dollars in company investment.

### Mentor Spaces

SENIOR DATA SCIENTIST

St. Louis, MO

May 2016 - Feb. 2017

- Built core analytics systems for Mentor Spaces to air underrepresented professionals with mentorship and career opportunities.
- Developed and deployed machine learning tools to connect students with mentors and job prospects tailored to their background.

### Bellhop

LEAD DATA SCIENTIST

Chattanooga, TN

Dec. 2014 - May. 2016

- Led a cross-functional team of data scientists and engineers to establish the foundational analytics and machine learning capabilities for Bellhops, a tech-enabled moving company.
- Led analytics initiatives leading to a \$13.5M Series B funding round.
- Implemented the company's first data warehouse and developed models to forecast demand across markets.
- Developed and implemented a variety of machine learning models to optimize customer acquisition, retention, and operations.

### Drexel University

DOCTORAL CANDIDATE (ALL BUT DISSERTATION)

Philadelphia, PA

Sept. 2011 - Dec. 2014

- Researched computational methods for exploring quantum systems and the role of Amyloid Beta-42 protein in the formation of Alzheimer's disease.
- Taught introductory level physics for undergraduate engineers.

### Helmholtz Zentrum Berlin

RESEARCH ASSISTANT

Berlin, Germany

Jun. 2012 - Dec. 2012

- Conducted research at Helmholtz Zentrum Berlin as part of the German academic exchange program DAAD.
- Developed custom sensor array systems for use in cryogenic, high magnetic field environments.
- Designed & fabricated sensor arrays, and created control & analysis software for the sensor system.

## Space Camp

CAMP COUNSELOR

Izmir, Turkey

Summer 2011

- Served as a counselor at Space Camp Turkey, fostering a passion for science and space exploration in young students from across the globe.

## Baylor University

OFFICE ASSISTANT

Waco, TX

Sep. 2009 - May, 2011

- Worked in the physics department office assisting with administrative tasks and student support.

## Baylor University

RESEARCH ASSISTANT

Waco, TX

Jan. 2009 - May, 2011

- Developed and implemented a novel method for infrared beam profiling including all necessary instrumentation control and data analysis software.
- Research formed the basis for an undergraduate thesis, publications in the Journal of Applied Physics, and in the AIP conference proceedings.
- Supported by multiple grant awards and earned the Barry M. Goldwater Scholarship supporting high achieving students in the sciences.

## Williams Hart and Boundas Law Firm

LEGAL ASSISTANT

Houston, TX

Summer 2007 & 2008

- Supported litigation against GSK seeking compensation for parents of children affected by the drug Paxil.
- Collected and reviewed evidence, including medical records, depositions, and other legal documents.
- Gained firsthand exposure to case strategy and legal writing, fostering an interest in legal advocacy.

## Interests

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- **Competitive rowing**, particularly sweep rowing in eights.
- **Military history & tactics**, with special interest in pre-gunpowder eras.
- **Musical theater and tap dance**, especially Gilbert and Sullivan's operettas.
- **Street Epistemology**, a method and practice for fostering constructive discussions on challenging topics.
- **Open Source Software**, making the world a better place through software that's free to use and open for all.

## Publications

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### JOURNAL ARTICLES

Visions: An Open-Source Library for Semantic Data

Ian Eaves, Simon Brugman

*Journal of Open Source Software* 5.48 (2020) p. 2145. The Open Journal, 2020

Time-dependent Spatial Intensity Profiles of Near-Infrared Idler Pulses From Nanosecond Optical Parametric Oscillators

L. J. Olafsen, J. S. Olafsen, I. K. Eaves

*Applied Physics B* 124.6 (May 2018) p. 110. 2018

Synchronized Mid-Infrared Beam Characterization of Narrow Gap Semiconductors

L. J. Olafsen, I. K. Eaves, J. S. Olafsen

*AIP Conference Proceedings* 1416.1 (2011) pp. 88–90. 2011

### THESES

Numerical Integration of the Wavefunction in FEM

I. K. Eaves

*Drexel University* (Dec. 2013). 2013

Computational Mid-Infrared Beam Analysis

I. K. Eaves

*Baylor University* (2011). 2011