# Introduction to NLP & Deep Learning

- Instructor & TA intros
- Course logistics
- Course overview (30 min)
- Math refresher (100 min)
  - Linear algebra
  - Probability theory
  - Neural networks
- Lab (30 min):
  - Setup python3 environment
  - Setup Github
  - Bash tutorial (as-needed)

# Chris Larson, Instructor

# Education:



B.A. Physics Coe College Cedar Rapids, IA



Ph.D. Mechanical Engineering
Major field: Theoretical & Applied Mechanics
Minor field: Computer Science
Cornell University
Ithaca, NY

## Interests:

**Statistical machine learning** 

**Natural Language Processing** 

**Black box optimization** 

**Robotics & human computer interaction** 

**Stretchable electronics** 

**Modeling physical systems** 

- Fracture mechanisms in brittle solids
- Finite deformation

## **Software Engineering**

- Python, C++
- ML infrastructure
- Distributed systems



### Lead Machine Learning Engineer StormForge

Apr 2020 - Present · 1 year 5 months

Washington, District of Columbia, United States



### **Adjunct Professor**

Georgetown University

Jul 2021 - Present · 2 months

Washington, District of Columbia, United States

Teaching graduate level courses in machine learning



#### Capital One

2 years 3 months

Manager, Machine Learning

Jun 2019 - Feb 2020 · 9 months
Washington, District of Columbia, United States

Machine Learning Software Engineer

Dec 2017 - Jun 2019 · 1 year 7 months

Washington, District of Columbia, United States



#### **PhD Candidate**

Cornell University

Aug 2013 - May 2017 · 3 years 10 months Ithaca, New York Area



#### Corning Incorporated

Oct 2011 - Aug 2013 · 1 year 11 months

Corning, NY



#### United Space Alliance

Feb 2009 - Apr 2011 · 2 years 3 months

Kennedy Space Center, FL



\$70M raised









