

AIBridge Boot Camp

July 10-14, 2023

Cornell University, Ithaca, NY



- Build a bridge between AI and your application domain
- Learn how to use AI toolboxes
- Minimal prior programming experience required
- Apply what you learn in hands-on labs
- Get immediate help from lab instructors
- Free of charge

The purpose of AIBridge is to bridge the gap between computer science and other disciplines. To many, working with AI might seem an unreachable objective. However, in reality, a 5-day boot camp is enough to get started. AIBridge will provide basic programming capability in Python and knowledge of object-oriented programming as well as the concepts behind Machine Learning and how to implement it using a popular toolbox, Scikit-Learn.

Python Basics

- Operations (pip, jupyter, colab)
- Types and Type Operations
- Control Flow (for, while)
- Logic Operations (if, else)
- List and String Manipulation
- Object-Oriented Programming
- Input/Output

AI Content

- Data Manipulation
- Linear and Logistic Regression
- Classification (decision trees, random forest, naïve bayes, etc.)
- Ops (training/testing, over/underfitting)
- Unsupervised Learning
- Scikit-Learn Toolbox

Instructor: [Xin Liu](#), Professor, Computer Science, UC Davis, in collaboration with Samuel Ren and Jiaming Situ

Location: Cornell University, 253 Rhodes Hall, Hoy Road, Ithaca, NY 14853

Dates Monday, July 10 thru Friday, July 14, 9:00am to 4:00pm daily

Daily Schedule

9:00-10:30 Lecture 1
10:30-12:00 Lab
12:00-1:00 Lunch Break
1:00-2:30 Lecture 2
2:30-4:00 Lab

Lectures

Day 1: Lecture 1: Colab, Types, Control	Lecture 2: Logic, List, I/O
Day 2: Lecture 1: Function, OOP	Lecture 2: Linear Models
Day 3: Lecture 1: Data Manipulation	Lecture 2: Classification
Day 4: Lecture 1: Ops, Classification	Lecture 2: Unsupervised
Day 5: Lecture 1: Ethics, Adv. Technology	Lecture 2: Project Presentation

Cost: No fee to attend. Attendees responsible for own lunches (except Day 5).

Registration: *Please do not register unless committed to attend.* Demand is high (35 limit). Preference given to grad students/postdocs/staff working with Cornell faculty, followed by undergrads and industry. [Register here.](#)

Participants: Bring your laptop (even a Chromebook will do). Gmail access to your Google Account required.

Contact: Eslie Medallon, Cornell Center for Advanced Computing, eam425@cornell.edu, 607-255-3863.



"AI's expanding impact across application domains underscores the importance of AI education for everyone" – Xin Liu



AIBridge is an educational outreach program of the AI Institute for Next Generation Food Systems (AIFS). The institute aims to increase efficiencies in using AI and bioinformatics. AIFS partners are UC Davis, UC Berkeley, Cornell University, University of Illinois, USDA, and UC Agriculture and Natural Resources. AIFS wishes to thank the Cornell Center for Advanced Computing (CAC) for facilitating this event.