

The purpose of the AlBridge bootcamp is to bridge the gap between computer science and other disciplines. AlBridge will teach basic Python programming, the concepts behind machine learning, and how to use it. This bootcamp will be **in-person** and will target mainly non-CS adults interested in Al.

# Why You Should Join AlBridge

- Build communication/leadership skills
- Help grow the reach of AI to your community
- Develop confidence and breadth teach a very diverse audience, potentially including adults and graduate students in universities

# **Key Aspects of AlBridge**

- First bootcamp offered at UC Davis in June 2022, to 17 undergraduate, graduate students, and postdocs.
- Upcoming camp planned at Saratoga Library.
- Aims to extend AlBridge to other schools and public libraries.
- Targeting non-CS people with a focus on intuition and usage of AI toolboxes

### **Expectations for Teachers**

- General programming experience and 1+ year of experience with Python
- Knowledge of machine learning concepts listed below
- Strong public speaking skills
- Writing readable code at a reasonable pace
- 10 hours available allocated for training
- Additional time commitment for practice
- Strongly Recommended: Attend camp at Saratoga Library (shown next page)

### **Expectations for Teacher Assistants**

If you are enthusiastic about AI and want to learn more, being a TA is a good starting point

- General programming experience and 1+ year of experience with Python
- 10 hours available allocated for training
- Strongly Recommended: Attend camp at Saratoga Library (shown next page)

Apply to be a Teacher or Teacher Assistant: <a href="https://forms.gle/UktZnLWKiFcSPUd67">https://forms.gle/UktZnLWKiFcSPUd67</a>

Website: http://aibridge.us

Contact us at: aibridgecamp@gmail.com

Next Course Date and location: 3/11, 3/12, 3/18, 3/19, 2023, 1 - 5pm. In-person at the Saratoga Library

#### **Python Basics:**

- Operations (colab)
- Types and type operations
- Control flow (for, while)
- Logic operations (if, else)
- List and string manipulation
- Basic object-oriented programming
- Input/output

### Machine Learning (ML):

- Data manipulation
- Classification (Decision Trees, Random Forest, Naive Bayes, SVM, etc.)
- Regression (linear and logistic regression)
- OPs (training, validation, testing)
- Unsupervised learning (clustering, KNN)
- Scikit-Learn toolbox

## Schedule

Daily Schedule	Content Sch	nedule	
1:00 - 2:00 Lecture 1	3/11/23 Da	ay 1: Lecture 1: Colab, types, control	Lecture 2: Logic, list, I/O
2:00 - 2:50 Lab	3/12/23 Da	ay 2: Lecture 1: Function, OOP	Lecture 2: Regression
2:50 - 3:10 Break	3/18/23 Da	ay 3: Lecture 1: Data manipulation	Lecture 2: Classification
3:10 - 4:10 Lecture 2	3/19/23 Da	ay 4: Lecture 1: OPs, classification	Lecture 2: Unsupervised
4:10 - 5:00 Lab			

#### Instructors

Samuel Ren, 10th grade, Gunn HS Jiaming Situ, 11th grade, Homestead HS Xin Liu, Prof. of Computer Science, UC Davis

Register to attend
Saratoga Library
13650 Saratoga Ave
Saratoga, CA 95070
www.sccld.org/saratoga

### Sponsor

NSF/USDA <u>Al Institute</u> for Next Gen. Food Systems



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