

# LIAM TAN

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## EDUCATION

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**University of California, Berkeley**

Intended Computer Science and Mathematics Double Major  
College of Letters and Science

*Expected Graduation Date of 2024*

Overall GPA: 4.0

## EXPERIENCE

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**UCSD/Winsantor**

*December 2020-June 2021*

San Diego, California

*Group led by Dr. Gary Cottrell*

- This group sought to create a model that could take a digital biopsy slide and count the amount of nerve crossings within it in order to track diabetes patient nerve growth.
- Created a nerve tracing algorithm using DBSCAN clustering as well as iterative methods in order to count and confirm skin nerve crossings.

**Leonardo DRS Daylight Solutions**

*October 2019 - January 2020*

San Diego, California

Implemented K-means clustering to cluster spectrographic wavelength data for a spectroscopy imaging microscope.

**University of California, Berkeley**

*September 2021 - Present*

Berkeley, California

Reader for CS70, the discrete mathematics and probability class

- Grade HW/Exams and hold office hours
- Previously an academic intern - helped facilitate discussion

## SELECTED PROJECTS

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**Gitlet(Java)**

A lightweight version-control system mimicking git. Contains features for branching, remote usage, committing, and merging branches.

**Enigma(Java)**

A simulator for the enigma cipher machine. Can simulate any configuration of the original machine.

## RELEVANT COURSES

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### 1. Core Courses

Multivariable Calculus, Linear Algebra, Differential Equations, Discrete Mathematics and Probability Theory, Data Structures and Algorithms, Proof-Based Linear Algebra, Intro to Computer Science

### 2. Online Courses

Machine Learning by Stanford, Deep Learning Specialization by DeepLearning.ai, Probability - The Science of Uncertainty and Data by MITx

## SKILLS

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**Programming skills:**

Java, Python, Matlab(basic), Scheme, LaTeX