



AVANTIKA GHOSH

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Education and Training

University of California, Berkeley, CA | Bachelor of Arts Computer Science | Expected in 06/2023

Current courses: Structure and Interpretation of Computer Programs (Python) | Foundations of Data Science (Python) | Language and Linguistics | Data Connector Course (Economic Models)

Skills C++, Python, Java, Javascript, Scheme, Lisp, SQL, Git, Python Spark Certification Training using Pyspark (Apache Spark and the Spark ecosystem, including Spark RDD, Spark SQL, Spark MLlib, Spark Streaming, HDFS, Sqoop, Flume, Spark and GraphC)

Work Experience

Naval Postgraduate School (NPS), Monterey, CA **2018-2019**

Science and Engineering Intern

- Benchmarked ML algorithms capacity to process different transponder attributes of a 10,000 military aircraft dataset to identify anomalous behavior to seek potential terrorist/surveillance activity
- Created models of the K-Means Clustering, Density-based Spatial Applications with Noise, and Linear Regression
- Presented research findings at the Summer Research Symposium at CSU Monterey Bay, CA. Received \$3000 stipend from NPS and \$1000 research grant from Stanford AI4ALL

High School AI Lab (HAIL), Stanford University, CA **2017-2018**

Research Volunteer

- Aided graduate students in data testing on a research project to improve the accuracy and early detection of lung cancer
- Created a model to reduce the number of false Positives (FPs) using black circular algorithm for feature extraction and genetic algorithm (GA) based clustering using the nodules on medical images like CT and MRI scans.

AI4ALL, Stanford University, CA **2016**

Researcher

- Improved hygiene in hospitals using computer vision techniques by programming cameras to filter images of hands of hospital personnel between image channels to identify germs.

Activities and Honors

- **NCWIT Award for Aspirations in Computing (AiC)| San Francisco Bay Area Winner** **2017**
Awarded for achievements in computing, proven leadership ability, and academic performance

- **First Place in Hack for Social Impact Summit (Hosted by Blueprint)** **Fall 2019**

- **Member, Women in Science and Engineering Program (UC Berkeley Chapter)** **2019-2020**

- **Junior Director, Byte-Sized** **2017-2018**
Non-profit student-run STEM Outreach group. Taught middle school girls, from all over the Bay Area, about topics including Natural Language Processing, AI, and Web design

- **Association for Computing Machinery & Institute of Electrical and Electronics Engineers** **2019**

- **Certificate of Merit Piano (Level 10)** **2017**
Awarded by the Music Teacher's Association of California after testing in performance, technique, ear training, sight reading, music theory, and participated in several Branch Honors Recitals (Santa Clara University)