

# ALEKSANDRA (TENG) MA

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## **Bio**

I'm a data analytics consultant at Deloitte focusing on text normalization and data visualization for a global streaming service company. In my spare time, I do projects in the intersection of **music information retrieval** and **machine learning**.

## **Education**

**University of California, Berkeley**

**Aug 2016 – May 2020**

BA, Statistics & BA, Data Science

## **Research & Project Experience**

**UC Berkeley Center for Effective Global Action**

*Full-Time Research Assistant, Berkeley Initiative for Transparency in the Social Sciences*

Aug 2020 – Jan 2021

- Built and maintained an R Shiny web app to assist policymakers with **informed decision making** through inputting interactive assumptions of research papers on social and fiscal impacts of deworming in developing countries
- Deployed the [project](#) in cloud for transparency after aesthetics enhancement through HTML & CSS
- Wrote tutorials on topics including [R Shiny](#), [Git](#), and mentored undergraduate researchers

**Center for Computer Research in Music and Acoustics, Stanford University**

*Static Music Emotion Recognition with 2D CNN Using 0.5-Second Segments in PyTorch*

Aug 2022 | Deep Learning for Music Information Retrieval Workshop Project

Rebalanced a subset of the training dataset from the PMemo [dataset](#). Trained a 6-layer neural network in PyTorch on the emotion annotations (arousal and valence) and Mel Spectrograms (from raw audio files) of 0.5-second song chorus segments. See presentation [here](#).

**The Sound of AI Hackathon**

*Participants Spotify User Insight + Drum Stems Separation and Synthesis*

Jul 2022

Collected 17 hackathon participants' top 50 tracks from Spotify's API and built a visualization [website](#). Separated out the drum stems of the top 5 highest user score tracks and generated a theme drum track. See presentation [here](#).

**Independent Web Scraper Project**

*User Based Google Scholar Web Scraper for Scholar & Institution Analysis*

Sep 2022 – Oct 2022

Wrote a Python program that saves a local Excel file with articles and institution affiliations for up to two coauthor connections of the input seed scholar. User info is scraped from Google Scholar using BeautifulSoup. GitHub repository available [here](#).

## **Independent Music Generation Project**

*Generating Jazz Lo-fi Hip-hop Music with LSTM (work in progress)*

Oct 2022 – Present

Working with sample lo-fi MIDI files from Cymatics and processing the MIDI files with Music21. Using LSTM to generate the output and adding in symbolic drum roll and ambience sounds for the final track.

## **Professional Experience**

### **Deloitte & Touche LLP**

*Consultant, Data Analytics | Global Streaming Service Company*

Aug 2021 – Present

- Developed from scratch a rule-based **cost account name normalization** pipeline for 190+ productions (15000+ account names) across different genres and production studios using SQL and Python
- Clustered vendor names on 30,000+ ledger transactions using **NLP methods**: cosine similarity and tf-idf
- Separated independent contractor person names from organizations using **Named Entity Recognition**
- Built and deployed 6 **Tableau dashboards** that were well-received by Head of Production Finance and provided biweekly trainings to Production Finance Executives on Tableau navigation and tooling
- Lead a team of 6 off-shore members and report directly to Head of Production Finance

*Analyst, Advertising Risk | Client: Global Social Media Company*

Jan 2021 – Aug 2021

- Created & deployed Google Apps Script **automation scripts** improving spreadsheet efficiency by 60%
- Performed data usage compliance assessments for 200+ 3rd party advertisers and measurement partners

*Intern, Software License Compliance Review*

Jun 2019 – Aug 2019

*Intern, Market Research*

Jun 2018 – Aug 2018

- Wrote the first draft for the 64-page **market [report](#)** on Chinese education landscape

## **Leadership & Teaching**

### **Ascend at Berkeley | Business & Leadership Student Organization**

*President (Final Semester Position)*

Aug 2017–Dec 2019

- Organized and hosted a multi-round [tech case competition](#) featuring 8 pioneer judges, including the Apple co-founder **Steve Wozniak**, and 200+ students participated
- Led the 64-member organization, incl. overseeing 34 hosted events & handling a budget of \$12,000+

### **China Entrepreneur Network at Berkeley**

*Co-founder & President*

Aug 2018 – May 2019

- Established sponsorship with two companies for startup fund; recruited core and general members
- Hosted 4 speaker panels, 2 volunteer events, 2 office tours in the field of tech, entrepreneurship, and social impact; speakers include Yunyao Li, Head of Machine Learning, Apple Knowledge Platform.

## **GirlUp at Berkeley**

*Vice President*

Aug 2017 – Dec 2019

Hosted talks featuring women professors in STEM, raised money and donations for local women.

## **InAmerica Education LTD**

*Teacher*

Jun 2016 – Jun 2017

Wrote and taught lessons in TOEFL Writing, Speaking, and SAT Grammar and Math.

## **Honors & Awards**

- |   |             |
|---|-------------|
| - Applause Award, Deloitte (3 time recipient)                     | 2021 – 2022 |
| - Dean's Honors List, UC Berkeley                                 | 2016 – 2017 |
| - Outstanding Social Innovation Award, China Thinks Big           | 2015        |
| - Level 10 Certification in Piano, Chinese Musician's Association | 2010        |

## **Other Activities**

- I keep a [blog](#) about things I find interesting, from music informatics to similarities between Prometheus and Hamilton. I write in both English and Mandarin Chinese.
- I was part of the UC Women's Chorale and the dance group AFX.

