

Can Koz

SOFTWARE ENGINEERING

Oracle JUN 2019 – AUG 2019
Software Engineering Intern - Contractor

- Improved the run time of existing SQL Queries by 20% through code refactoring/rewriting.
- Visualized existing data according to requirements.
- Worked as an open source contributor to All Data Management Project which utilized Apache Hadoop.
- Held, attended coding sessions on weekly online meetings and presentations.

Nokia JUN 2018 – AUG 2018
Research and Development Intern

- Design UI by using Java for gateways which currently enable 5G in Turkey.
- Built UI using Java which supervises 2 million+ of nodes / gateways located around Turkey.
- The UI visualizes performance metrics for the infrastructure that reaches out to 80+ million devices that use cellular internet.

MACHINE LEARNING RESEARCH

University of Oxford, VGG JUL 2023 – CURRENT
MSc Thesis Student

Currently working on generation of controllable and deformable objects. Supervisor: Dr. Tomas Jakab, Luke Melas-Kyriazi

Carnegie Mellon University, VDEL MAR 2020 – MAR 2023
Undergraduate Research Assistant

“Flaw Detection in Metal Additive Manufacturing Using Deep Learned Acoustic Features” *NeurIPS 2020* [Paper](#)

Zhang, W. Abranovic, B. Hanson-Regalado, J. Koz, C. Duvvuri, B. Shimada, K. Beuth, J. Kara, L. B.

- Built a CNN model that classifies flaws during the additive manufacturing process from audio samples.
- Use transfer learning, deployment of a pretrained ResNet50 for sound classification, PyTorch, Python, and SciPy.
- Visualization of results such as the confidence matrix, use of Adobe Photoshop for images on the paper.

“Data Augmentation of Engineering Drawings for Data-Driven Component Segmentation” *IDETC-CIE 2022* [Paper](#)





Zhang, W. Chen, Q. Koz, C. Xie, L. Regmi, A. Yamakawa, S. Furuhashi, F. Shimada, K. Kara, L. B.

- Engineered (COV) Coefficient of Variation feature and implemented Zernike Moments of components which improved segmentation results by 5%. [Video](#)
- Created a preprocessing step which combined Hough line detection with custom erosion and dilation steps to segment different parts of the engineering drawings. [Video](#)
- Built a PyTorch Geometric pipeline and implemented GraphSage model that reached 90% accuracy for classifying dimension / contour lines on engineering drawings. [Video](#)

Space Technologies Research Institute DEC 2018 – JAN 2019
TUBITAK

Computer Vision Lab Intern

- Image search with Histogram of Graphs (HOG) on Inria Holidays dataset using Python, OpenCV.

 [canxkoz.com](https://github.com/canxkoz)
 linkedin.com/in/canxkoz/
 github.com/canxkoz/
 canxkoz@gmail.com

EDUCATION

2023 – 2024 **University of Oxford**
Computer Science
MSc in Advanced Computer Science

2020 – 2022 **Koc University**
DEANS STUDENT, TOP 10 %, GPA 3.82
Computer Engineering
Bachelor of Science

2019 **University of California, Berkeley**
HOG CHAMPION, CS61A
Computer Science
Summer Sessions

2018 – 2020 **Diablo Valley College**
HONORS
Electrical and Computer Engineering
*for Transfer**

AWARDS

1st Place, The Resiliency Challenge - Health
Boston University

1st Place, World Hackathon Day 2020 - Health
First place among 200+ projects

2nd Place, hack:now 2020 Best use of Google Cloud
Major League Hacking - UC Berkeley

1st Place, CalHacks 2019 Goldman Sachs' Prize
UC Berkeley

PROJECTS

physyou - Treehacks 2021 [DevPost](#)

AI-powered physical therapist, anywhere. Built with Google MediaPipe, Google Firebase, BlazePose, Netlify.

COVID Analyst - hack:now [DevPost](#)

AI-powered targeted analytics for the COVID-19 pandemic. Built with Google Dialogflow, Google Cloud.

Pocket Analyst - Cal Hacks 6.0 [DevPost](#)

Navigate the world of financial markets with institutional grade information from your phone. Built with Blackrock API, Marquee API, Google Dialogflow, Google Cloud.

FixEye - Health ++ 2019 [DevPost](#)

Detect chronic diseases through non-invasive retinal scans. Built with Keras, Numpy, OpenCV, Python, Skimage.

No More TV Ads! - TreeHacks 2019 [DevPost](#)

A product which filters out ads from live TV. Built with C++, OpenCV, FFMPEG.

COMPUTER SKILLS

EXPERT Python, Pytorch / Pytorch Geometric, OpenCV, Git

INTERMEDIATE C++, Swift, Java, Keras, Unity, SQL
Google Cloud Platform, MATLAB,
Amazon Web Services, Adobe Photoshop

*Intended to complete undergraduate education in the US, returned back to Turkey due to COVID-19.

LEADERSHIP

DV Hackers

Sept 2018 – May 2020

President

- I coordinated 8 officers and a group of 45 members and prepared them to Competitive Coding Competitions.
- DV Hackers has been the largest programming club at Diablo Valley College during the time we co-founded the club.

[Github](#) | [LinkedIn](#) | [Website](#) | [Instagram](#)

Global Leadership Organization

SEP 2019 – OCT 2019

General Staff

- I was an attendee at GLO Summit in 2018 and joined the GLO's Certified Leadership Training Sessions throughout 2019.
- In 2019, I took part in the organization team as General Staff at the GLO Summit at Berkeley, CA.

[LinkedIn](#) | [Website](#)

TEACHING

Deeplearning.AI, AI for Medicine Specialization

Jul 2022 – Present

Mentor

- Support learners by answering queries.
- Report any technical issues found by Learners or Mentors on Gitissue.
- Report content related issues.
- Report content improvement suggestions.

Stanford University, CS Bridge 2021

Jun 2021 – Aug 2021

Section Leader

- Taught Python programming language to 10+ students in the CS Bridge program.
- Improved my teaching abilities by receiving feedback from Nick Troccoli.

[Certificate Link](#)

Stanford University, Code in Place 2021

Mar 2021 – May 2021

Section Leader

- As a volunteer section leader, I prepared and taught a weekly discussion section of 8-10 students to supplement professors' lectures.
- Created and led weekly discussion sections for Code in Place, introductory programming class offered globally during COVID19 crisis.
- Increased students' understanding of Computer Science concepts and fundamentals.

[Certificate Link](#)

VOLUNTEERING

UC Berkeley, Cal Hacks 5.0

Nov 2018

Volunteer

- I helped making the biggest collegiate hackathon possible as a Volunteer at CalHacks 5.0

Nokia

Jun 2021 – Aug 2021

StrongHer Turkey Antenna Team Member

- StrongHer is an employee network on Nokia where members work on various activities for gender diversity including networking opportunities, personal development, and social activities.

NON-DEGREE COURSEWORK

- Self-Driving Cars Specialization (4 Courses) | [Certificate Link](#)
- Tweet Emotion Recognition with TensorFlow (1 Course) | [Certificate Link](#)
- AI for Medicine Specialization (3 courses) | [Certificate Link](#)
- Deep Learning Specialization (5 Courses) | [Certificate Link](#)