K. DORUK KARINCA

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EDUCATION

University of California, Los Angeles (UCLA)

M.S. in Computer Science   3.92/4.0 GPA, Expected Jun 2021

B.S. in Computer Science and Engineering   *3.5/4.0 GPA,* Aug 2019

Courses: Computer Vision, NLP in Gender Bias, Statistical Bioinformatics, [Machine] Learnability Theory, Search Algorithms, Statistics, Discrete Math, Data Mining, Probabilistic Databases, Reinforcement Learning

Honors: Dean's Honors

WORK EXPERIENCE

UCLA Visual Machines Group   Los Angeles, CA

Graduate Student Rotation Researcher   Apr 2020 – Present

- Detect heart rate and blood oxygen levels from webcam videos of people's faces for telemedicine use.
- Develop provisional-patented model to help reduce in-person doctor visits during the pandemic.

LendingClub   San Francisco, CA

Software Engineering Intern   Jun 2019 – Aug 2019

- Implemented full-stack click tracker using **React, Node, SQL, Spring Boot** to collect users' loan preferences.
- Captured 800+ clicks/week on partner loans using this tracker, gathering key business insights on user behavior.
- Revised UI state management for loan offers page to preserve user's progress even after a browser refresh.

Veritas   Santa Clara, CA and Mountain View, CA

Software Engineering Intern   Jun 2018 – Sep 2018 and Jun 2017 – Sep 2017

- Developed authentication client & server compatible with Veritas products using **REST**, **RSA crypt**, and **PL/SQL**.
- Developed full-stack desktop app using **Spring Boot** and **JavaFX** to auto-renew users' expiring Veritas licenses.
- Wrote **Java** app to analyze any PDF invoice heuristically using Tesseract and LingPipe **NLP,** extracting payment date, tax amount etc. saving time by eliminating manual data entry, providing service to 86% of Fortune 500 firms**.**
- Improved navigation experience for **Angular**-based web app for customers like Intel, T-Mobile, and BofA.
- Organized events as a lead intern and wrote articles on Veritas' on-campus life with interns.

Howard Hughes Medical Institute, Ozcan Research Group   Los Angeles, CA

Undergraduate Researcher and Developer   Dec 2015 – Mar 2019

- Contributed to 3 academic papers, 3 conference proceedings and 4 oral presentations overall.
- Used **MATLAB**-based **machine learning** image analysis using Boosted Tree & **neural network**.
- Raised sickle cell anemia detection accuracy from portable microscope images from 75% to 92%.
- Reduced diagnosis costs in Sub-Saharan African countries having >150,000 deaths/year.
- Received *Best Project Award at Ozcan Research Group* showcase.

PERSONAL PROJECTS

keras-buoy (Github: github.com/dorukkarinca/keras-buoy)   Sep 2018

- Built Keras wrapper that automatically recovers from a crashed/accidentally-cancelled ML training process.
- Made pip package in **Python** to help aspiring data scientists train ML models for longer periods easily.
- Project received 10 stars and 4 forks on Github.

featuretools (Github: github.com/FeatureLabs/featuretools)   Aug 2019

- Contributed to **Python** open-source project that automates the machine learning feature engineering process.
- Added support for classifying features that contain US states and regions; wrote unit tests.

Uplift (Android app):   Nov 2016 and Apr 2015

- Built backend of social network application based on location-based content ranking using **Node.js**.
- Won Top 10 Prize at LA Hacks, UCLA's hackathon, among 200 teams.
- Won Facebook Award: Best Product among 10 teams, as decided by a jury of Facebook engineers.

TECHNICAL SKILLS

- **Proficient:** Python (Keras, Pytorch), Java (Spring Boot), MATLAB.
- **Basic:** TensorFlow, PL/SQL, Bash.