# K. DORUK KARINCA

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#### **EDUCATION**

### University of California, Los Angeles (UCLA)

M.S. in Computer Science

Expected Aug 2021

B.S. in Computer Science and Engineering

3.5/4.0 GPA. Expected Aug 2019

**Relevant Courses**: Statistical Machine Learning, [Machine] Learnability Theory, Search Algorithms, Networks, Algorithms & Complexity, Programming Languages, OS, Computer Architecture, Statistics, Discrete Math

Honors: Dean's Honors

#### **WORK EXPERIENCE**

#### 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

Jun 2018 - Sep 2018 and Jun 2017 - Sep 2017

Software Engineering Intern

- Developed authentication client & server compatible with Veritas products using REST, Argon2, and PL/SQL.
- Developed full-stack product, Veritas License Auto Sync, using **Spring Boot** and **JavaFX** that auto-renews expiring Veritas product licenses, to provide service to 86% of Fortune 500 companies.
- Wrote **Java** app to analyze any PDF invoice heuristically using Tesseract and LingPipe **NLP**, extracting data such as payment date, tax amount etc, saving time and money by eliminating manual data entry.
- 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

Undergraduate Researcher and Developer

Los Angeles, CA

Dec 2015 - Mar 2019

- Contributed to 3 academic papers, 3 conference proceedings and 4 oral presentations overall.
- Sickle Cell Detection
  - Raised sickle cell anemia detection accuracy from portable microscope images from 75% to 92% by developing
    MATLAB-based machine learning image-analysis software using a Boosted Tree and neural network.
  - Reduced diagnosis costs in Sub-Saharan African countries that have >150,000 deaths/year.
  - o Received Best Project Award at Ozcan Research Group showcase.
- Bee Parasite Detection: Collaboratively developed C#, MATLAB app to count parasites from microscope images.

#### **PROJECTS**

#### 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.

#### TensorFlow Column Comparator (Github: bit.ly/tensorflowcc)

Sep 2018

- Built TensorFlow automator to select best features with normalization and hyperparameter optimization.
- Made console tool in **Python** to allow data scientists to easily obtain relationships in previously unseen data.
- Calculated and displayed user's training progress and error rates of correlation for finished trainings.

#### Uplift (Android app):

Nov 2016 and Apr 2015

- Built 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.

# History Slides (web application: historyslides.com):

May 2014 - Sep 2018

- Implemented slideshow capability, using native **JavaScript**, for a map-based app for interactive history teaching to fill the gap of visualization of history in traditional Turkish education system.
- Built interactive world map in which major WWI events are chronologically highlighted on historical boundaries.

#### **TECHNICAL SKILLS**

- Proficient: Python, Java (Spring Boot), JavaScript (Node, Parse), MATLAB, React.
- Basic: TensorFlow, PL/SQL, Verilog, Bash.