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.js,** and **Spring Boot** to collect users' loan preferences.
- Wrote tracker capturing 800+ clicks/week on partner loans, gathering key business insights on user behavior.
- Revised UI state management for loan offers page to preserve idempotency 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**, **Argon2**, and **PL/SQL**.
- Designed 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**.**
  - Created UI that lists installed Veritas apps and their license expiration dates for subscription-based apps.
  - Developed login UI that automatically activates Veritas desktop apps purchased by the logged-in user.
  - Integrated **RSA-2048 encryption** in order to securely store passwords on disk so users log in only once.
  - Prevented the need for users to memorize passwords and subscription keys, thereby improving productivity.
- Wrote **Java** app to analyze any PDF invoice heuristically using Tesseract and LingPipe **NLP,** extracting data such as payment date, tax amount etc, saving companies time and money by eliminating manual data entry.
- Improved navigation experience of license management pane for **Angular**-based web app for customers like Intel, T-Mobile, and BofA.
- Extended **Oracle SQL** database API in **Spring Boot** to provide entitlement insights.
- Organized events and wrote articles on Veritas' on-campus life with interns in the capacity of a lead intern.

Howard Hughes Medical Institute, Ozcan Research Group Los Angeles, CA
Undergraduate Researcher and Developer Dec 2015 – Mar 2019

- Sickle Cell Detection
  - Developed **MATLAB**-based **Machine Learning** image-analysis software (Boosted Tree Neural Network) detecting sickle cell anemia from portable microscope images, raising detection accuracy from 75% to 92%.
  - Reduced diagnosis costs in Sub-Saharan African countries that have >150,000 deaths/year.
  - Received *Best Project Award at Ozcan Research Group* showcase.
- Bee Parasite Detection
  - Developed Windows Phone app with job control that allows a user to take photos of microscope-zoomed images, sends them to a MATLAB server and displays the number of parasites detected from the image.
  - Contributor in academic paper: *Turbidity Measurement Using a Smartphone & Bee Parasite Detection Using a Smartphone*, UCLA.

PROJECTS

TensorFlow Column Comparator (Github: bit.ly/tensorflowcc) Sep 2019

- 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 April 2015

- Built upvote, post, comment, push notification back-end systems for a social network application that aims to boost the user's mood by prioritizing the display of well-performing posts based on location, 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 – Present

- 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 (Angular, Node, Parse), MATLAB, React, C, C++.
- **Basic Knowledge:** TensorFlow, Oracle PL/SQL, Verilog, Bash, Jenkins