**K. DORUK KARINCA**

(424) 394-8146 — dorukkarinca@gmail.com — Los Angeles, CA — [github/dorukkarinca](https://github.com/dorukkarinca) — [linkedin/dorukkarinca](https://linkedin.com/in/dorukkarinca)

**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**](http://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**](http://historyslides.com/)**):** May 2014 – Present

* Implemented slideshow capability, using native **JavaScript,** foramap-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