**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 faces for telemedicine use.
* Develop GAN for synthetic dataset augmentation to improve said heart rate detector in a deep learning setting.
* 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 4 academic papers, 11 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**](https://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 downloaded over 2000 times, received 13 stars and 4 forks on Github.

**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.