

# Fatma Kevser Akcay

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## EDUCATION

### HARVARD UNIVERSITY

#### BA IN COMPUTER SCIENCE

May 2016

Senior Thesis: An Analysis of the Stagefright Bugs (Android Security)

### SELECT COURSEWORK

Machine Learning  
Multi-Agent Robotic Systems  
Artificial Intelligence  
Computational Theory  
Networks

## SKILLS

### PROGRAMMING LANGUAGES

Javascript (Node.js, React.js) • C++ •  
Python • C • OCaml

### DATABASE SYSTEMS

TimescaleDB • Postgres • Redis •  
MongoDB

### PLATFORMS

Amazon Web Services • Google Cloud  
Platform • Linux

## LINKS

Website:// [fatmaakcay.github.io](http://fatmaakcay.github.io)

Github:// [fatmaakcay](https://github.com/fatmaakcay)

LinkedIn:// [Fatma Kevser Akcay](https://www.linkedin.com/in/fatma-kevser-akcay)

### INTERESTS AND HOBBIES

Running, snowboarding, fine arts

### CURRENT LOCATION

London, UK

## EXPERIENCE

### VIVACITY LABS | PRODUCT DEVELOPMENT ENGINEER

April 2017 – Present

- Lead engineer on proof-of-concept [connected autonomous vehicles project](#).
- Built and maintained API and DB systems to process and serve telemetry data to clients consisting of hundreds of millions of data points.
- Built and maintained IoT infrastructure and web apps to configure and control 2,500+ IoT sensors.
- Contributed to in-house ML and image processing libraries in C++.

### VALVEN | SOFTWARE ENGINEER

January 2017 – March 2017

- Created iOS application for Edge, a network management and analytics web service for SOHO owners.
- Started planning deep learning algorithm (including architectural planning) for gamification retail reward system.

### WELLIST | SOFTWARE ENGINEER INTERN

September 2014 – May 2015

- Online navigation tool to help patients and lay caregivers connect to non-clinical services.
- Built out the Wellist API as the second SWE on the team.
- Implemented the algorithm to give service recommendations based on user profile.

## PROJECTS

### MULTI-AGENT SYSTEM APPLICATION TO CONTROLLED WAREHOUSE DELIVERY | PYTHON + BERKELEY'S PACMAN PLATFORM

Simulated a multi-agent swarm system for warehouse package delivery that accounts for traffic along a chosen path. Algorithm inspired by AntNet and drone-hive model for dispatching robotic bees. [[Paper](#)]

### ROSPY AUTONOMOUS ROBOT PHOTOGRAPHER | PYTHON

Developed an autonomous robot that used Haar cascades face detection to find, approach and ask users to pose with props for a photo. The user could respond to the photo request verbally or through key input. Once taken, the photos were posted to the robot's Twitter [account](#)

### IoT FALL DETECTION SYSTEM | ARDUINO + JAVA

Created a multiple sensor WiFi enabled system that detects falls in small areas. System uses distance data from ultrasound and LIDAR-lite sensors to determine position of user. Used machine learning techniques to make the system user-specific.

### NEURAL NETS EMOJI RECOGNITION SOFTWARE | PYTHON

Implemented hand-drawn emoji recognition software using neural nets. Trained NN using backpropagation and genetic algorithm to determine which method was favorable.