YAĞIZ HİKMET **KARAKUŞ**

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A highly experienced computer engineer on Artificial Intelligence Development and highly self-motivated person to work efficiently on every environment. Passionate and innovative engineer with a strong connection to the field of Computer Science, with a constant desire to discover new talents, and always ready to learn new things. A person who knows the true meaning of teamwork and acting, accordingly, has good communication skills and a collaborative approach to problem-solving.

EXPERIENCE

AUG 2023 – PRESENT

COMPUTER VISION ENGINEER(VOLUNTEER), KOÇ UNIVERSITY - İSTANBUL, TURKEY

→Technologies: Python, Google Collab, AWS, Tensorflow, DVC

- In the Dx Biotech Lab working on the Skin Cancer Detection Project and take charge in image enhancement, object localization, and create and deploy model with Ml-OPS CI/CD pipelines using git workflows and AWS ECR EC2 and creating website with next.js with app router (www.bluesense.ai)

APR 2023 – JUN 2023

RESEARCH SCHOLAR, TED UNIVERSITY – ANKARA, TURKEY

→Technologies: Python, Google Collab, MetaAI Wav2vec model, Scipy

- In the TED University working on the Speech Recognition Project and take charge in Expletory Data Analysis, Data Preprocessing and Feature Extraction parts of research with using SciPy

JUN 2022 – APR 2023

COMPUTER VISION ENGINEER, SMARTEST COMPANY - İSTANBUL, TURKEY

→Technologies: Python, Keras, Google Collab, MidaS, YOLO, RCNN, FAST RCNN, FCN, Semantic Segmentation, Unet, Multitask Learning, Labelme

- Coded and fine-tuned a convolution neural network for vehicle detection.
- Prepared a dataset with "Labelme" and made a road detection with a semantic segmentation model
- Learned multiple view geometry and triangulation to calculate the depth of an object through the camera with a stereo camera setup and use a monocular depth estimation model to make depth estimation from a mono camera setup
- Coded and implemented object tracking, object detection, and image classification, also used other machine learning and neural network architectures.

SEP 2022 – JUN 2022

CORPORATE DEVELOPMENT OFFICE (PART TIME), TED UNIVERSITY – ANKARA, TURKEY

→Technologies: Python, BeautifulSoup, Selenium, PostgreSQL, Django

- Coded YÖK Atlas web scraper for the university's quality team and helped them to analyze YÖK Atlas's data.

SEP 2020 – JUN 2022

JAVA LABORATORY TUTOR, TED UNIVERSITY – ANKARA, TURKEY

→ Technologies: Java

- Tutored the juniors in Java 1 and Java 2 lectures. And helped them to understand object-oriented programming concepts with Java

AGU 2021 –SEP 2021

SOFTWARE ENGINEER(INTERN), KOMTAŞ BILGI YÖNETIMI– ANKARA, TURKEY

→ Technologies: Apache Maven, Pentaho SDK, Java, PostgreSQL, Shell Scripting, Docker, Kubernetes.

- Build plug-ins with Java programming language for Pentaho BI tool. - Worked with Docker and Kubernetes in Linux.

EDUCATION

2018 - 2023

BSC, COMPUTER SCIENCE, TED UNIVERSITY, ANKARA, TURKEY

Grade: 2.99

2021 - 2023

SECONDARY FIELD, APPLIED DATA SCIENCE AND MACHINE LEARNING, TED UNIVERSITY, ANKARA, TURKEY

Grade: 3.40

SKILLS

- **SOFTWARE DEVELOPMENT**: ReactJS, NextJS, NodeJS,, VueJS, Redux, socket.io, Tailwind, ChakraUI, JavaScript, ExpressJS, React Native, HTML, CSS, Spring Boot, Rest API, Fast API, Flask, Django, React Native, Flutter
- **PROGRAMMING LANGUAGES:** JavaScript, Java, Python, C/C++, R, Assembly
- **SOFTWARE & OTHERS:** GIT, Google Collab, Minitab, Docker, N-gram Language Modeling, Self attention Networks, Convolutional Neural Networks, Time Series, Bayesian Inference, Decision trees, Random Forest, Ridge and Lasso Regression, SVM, Diffusion Models

- **PYTHON LIBRARIES:** NumPy, Pandas, TensorFlow, Pytorch, Keras, Seaborn, Scikit-learn, Matplotlib, Tinygrad , DVC
- **R LIBRARIES:** JavaScript nnet, tree, ggplot2, caret, ISLR, dplyr, mlbench, pROC, Shiny, tidyr, sqldf
- **DATABASE:** PostgreSQL, MongoDB, MySQL
- **CLOUD:** AWS, Google Cloud
- **OPERATING SYSTEMS:** Windows, MacOS, Linux Ubuntu, Mint

PROJECTS

- Self-attention transformer language model decoder from scratch with letter base embedding.
- Multinomial logistic regression for car price prediction in R
- Outlier detection to miles per gallon dataset
- CNN (not fully connected) from scratch and train for mnist handwritten digit dataset
- Image Generation platform called "Stable AI" with custom stable diffusion pipeline and Neural Style Transfer from scratch which users can generate images from image2image text2image pipelines and style them. And share their AI art. Using TensorFlow, torch, fast API, JWT, U-net, in the backend side and using react js framework NEXT JS
- Small gradient descent library from scratch with tanh, relu and sigmoid activation functions.

- S&P500 stock prediction with LSTM models
- YOLO v3 object Detection
- Trendyol web scrapper for product(clothes) info and images
- Flappy Bird game clone with JPanel and JFrame on Java
- Personal Unix Shell project with countless functionalities.
- HTTP Web Server project that includes Protected Server & Concurrent and Protected Server & Multithreaded Server & Worker Threads.

ACTIVITIES

- TED University Outdoor Sports Society Supervisory Board Member
- TED University Media Society Board of Management Member
- TED University Math's-Up Society Board of Management Member
- TED University Dance and Musical Society Supervisory Board Member
- TED University Google Developer Student Club Core Team Member
- TED University Social and Cultural Affairs Office Regie at University events

VOLUNTEER WORKS

2019 – 2019
IATEFL CONFERENCE STAFF, TED UNIVERSITY

TED University was the host of the 2019 International Association of Teachers of English as a Foreign Language conference and took charge in that event

2019 – 2019
DIGITAL STORYTELLING TUTOR, TED UNIVERSITY

Took charge as an instructor in 2019 for digital storytelling. - Taught digital storytelling to 9th-grades and help them to create a digital story

2018 – 2019
TED UNIVERSITY EXPERIMENTAL LEARNING CENTER, TED UNIVERSITY

Found a center for learning English with experience per form and write theater plays

CERTIFICATES

- Yeditepe University Google Developer Student Club – Android Studio Jam
- Istanbul Data Science Academy & Google – Machine Learning Boost camp and Machine Learning on Google Cloud

LANGUAGES

- Turkish – Mother language
- English – Pre-advanced
- German – Beginner