# **YIGIT ALPARSLAN**









GITHUB.COM/YA332

# **EDUCATION**

# B.S. in Electrical & Computer Engineering | MS in Computer Science | Drexel University

Concentrations: Artificial Intelligence and Computer & Network Security

Cumulative GPA: 3.97

Accelerated Combined Degree: BS/MS Program, Honors Degree, Dean's list

Expected Graduation: June. 2021

# WORK EXPERIENCE

# Co-Founder | Software Developer – HELP UP

#### September 2019—Present

- Develop a non-emergency chat platform for people who need help with mental depression
- Create account registration, login, encrypted messaging, chatroom features by using MERN Stack and Socket.io.
- Currently run a Kick Starter campaign to get funds and cover the web server and host costs

# Software Developer | SAP Americas - Newtown Square, PA

Apr 2019—Present

- Boosted start time of an internal assignment tracker app (400 people) by 15% via lazy loading and caching.
- Improved interaction count by 3x for an internal training app by implementing a conversational AI.
- Created a neural network with 86% accuracy to predict SAP Max Attention customer churn rate.

# Outage Analysis Technologies Coop | PJM, Audubon, PA

Apr 2018—Sept 2019

- Automated system performance for in-house applications, and databases via Python, PL/ SQL, and Visual Basic
- Tested/maintained new application functionalities throughout the agile development lifecycle with unit testing
- Created design specifications and associated testing documents by using Confluence/JIRA for quality control

#### Lem.ma, Inc | Start-up at Drexel University - Philadelphia, PA

May 2017— Sept 2017

- Created 2D and 3D 100+ plots/graphics by using Python and JavaScript
- Collaborated with designers, and developers to implement the content for the customers

#### **RESEARCH & PUBLICATION**

#### Perceptual Hashing as a Facial Image Filter | Drexel University

April-June 2019

Used Gaussian Blurring as a defense against adversarial attacks, which reported 3.6% increase in accuracy

# Towards Evaluating Adversarial Attacks in Audio Domain | Drexel University

January-April 2019

- Crafted 27 CTC white-box, and PCA black-box attacks on DeepSpeech with 100% success
- Presented research at Stanford Undergraduate Research Conference, 2019

#### Evaluating Deep Neural Networks' Robustness | Drexel University

Nov-Dec 2018

- Performed 10,000+ non-targeted CW attacks to DNNs and reported an improvement of %44.3 on L<sub>2</sub> defense
- Presented at Harvard National Collegiate Research Conference, 2018

#### Improving Vanadium Batteries | Drexel Electrochemical Energy Laboratory

- Simulated 2D/3D power flow in MATLAB, presented at Harvard National Collegiate Research Conference, 2017
- Scientific Publication, "Obstructed Flow Field Designs for Improved Power Density in Vanadium Redox Flow Batteries", B. Akuzum, Yigit C. Alparslan, N. Robinson, E. Agar, E.C Kumbur, J. Applied Chemistry, 2019

# SKILLS - Programming Languages - Tools and Frameworks

- BASH C MATLAB MySQL PowerShell HTML CSS JavaScript
- React.js
  Git
  Jupyter Notebook
  TensorFlow
  PyTorch
  NumPy
  Keras
  Pandas
  Scikit-learn
  NLTK
  Tableau

### LEADERSHIP EXPERIENCE

- Drexel Society of Artificial Intelligence Founder & President Promote AI research and mentor members
- Drexel STAR Research Scholar; Undergraduate Research Leader; DAAD-Rise Germany Scholar; Secretary, EWB
- DragonHacks (Drexel's very own 24-hour Hackathon) Committee Member
- Resident Assistant; Teaching Assistant; Event Coordinator, French Club Peer-Mentorship Program Awarded "Campus Awards" by the Embassy