# 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

# SKILLS - Programming Languages - Tools and Frameworks

Python
PowerShell
BASH
MATLAB
MySQL
HTML
XML
CSS
JavaScript

React.js
Git
Jupyter Notebook
TensorFlow
PyTorch
NumPy
Keras
Pandas
Scikit-learn
NLTK
Tableau

# WORK EXPERIENCE

# Co-Founder | Software Developer – HELP UP

#### September 2019—Present

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

# Software Developer | SAP Americas - Newtown Square, PA

#### Apr 2019—Present

- Develop an early talent training dashboard to help mentors track their mentee's progress used by 400 people
- Led a Speech-to-Text Conversational AI platform for the dashboard which increased daily interactions by 150%
- Predicted churn rate for SAP Max Attention customers with 86% by implementing a neural network.

# 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

Sep—Dec 2017

- 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

#### 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