# YIGIT ALPARSLAN





#### **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**

Python
PowerShell
BASH
MATLAB
MySQL
HTML
XML
CSS
JavaScript

#### **Tools and Frameworks**

• Unix • Git • Jupyter Notebook • TensorFlow • PyTorch • NumPy • Keras • Pandas • Scikit-learn • NLTK • Tableau

## WORK EXPERIENCE

#### Software Developer | SAP Americas - Newtown Square, PA

Apr 2019—Present

- Design an intern training dashboard to help mentors track their mentee's progress used by 400 people
- Develop a Conversational AI platform on top of the intern training dashboard to improve user experience.
- Implement Speech-To-Text recognition to increase efficiency of the Conversational AI platform by 50%

#### Outage Analysis Technologies Coop | PJM Interconnection, 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 awareness in AI research and mentor students
- Secretary, Engineers Without Borders
- Resident Assistant Organize educational programs to enforce healthy community on residence halls
- Teaching Assistant Teach 25+ students in lab for introductory CS classes in Python
- Event Coordinator, French Club Peer-Mentorship Program Awarded "Campus Awards" by the Embassy
- Drexel STAR Research Scholar, Undergraduate Research Leader, DAAD-Rise Germany Scholar 2017