

# YIGIT ALPARSLAN



## EDUCATION

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

- Concentrations: Artificial Intelligence and Computer & Network Security
  - Accelerated Combined Degree: BS/MS Program, Honors Degree, Dean's list
- Cumulative GPA: 3.97**  
Expected Graduation: June 2021

## SKILLS

### Programming Languages

- Python
- PowerShell
- BASH
- C
- MATLAB
- MySQL
- HTML
- XML
- CSS
- JavaScript

### Tools and Frameworks

- React.js
- 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, 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  $L_2$  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
- DragonHacks (Drexel's very own 24-hour Hackathon) - Committee Member
- 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; Secretary, EWB