

# YIGIT ALPARSLAN

## EDUCATION

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

- Master's Thesis on Artificial Intelligence and Machine Learning **Cumulative GPA: 3.97**
- Drexel Global Scholar, Drexel AI Founder, Honors Degree, Dean's List **Expected Graduation: June 2021**

## SKILLS

- Python • Java/Spring Boot • C • Hadoop • Git • Docker • HTML • CSS • JavaScript/TypeScript • NodeJS • React • Vue.js
- MongoDB • MySQL • RESTful API • GraphQL • Travis CI/CD • AWS/AliCloud/GCP • Django • Firebase • Tableau • Redis
- SAP UI5 • SAP Analytics Cloud/ Cloud Platform • SAP Web IDE • SAP Conversational AI • SAP BusinessObjects • SAP HANA XS

## WORK EXPERIENCE

### STAR Program Intern | SAP North America, Inc. - Newtown Square, PA

**Software Engineer Intern | SAP Predictive Maintenance Team** **June 2020 - Present**

- Develop RESTful API for a failure curve analytics app to predict time to failure and failure mode for equipments

**DevOps Engineer Intern | SAP Multi Cloud** **June 2020 - Sept 2020**

- Delivered 8 routing table displays for an internal monitoring platform (50+ people) on SAP's AliCloud architecture

**UI/UX Developer Intern | SAP Talent Acquisition and Branding** **Mar 2020 - June 2020**

- Develop and maintain jobs.sap.com (10 million+ visits / year) using HTML5, CSS3 and JavaScript

**Full-Stack Developer Intern | SAP Center of Expertise** **Apr 2019 - Mar 2020**

- Improved interaction counts by 3x for an internal training app (400+ people) by implementing a conversational AI
- Created a neural network in SAP Cloud Platform to predict SAP cloud customers' churn rate with 86% accuracy

### Outage Analysis Technologies Coop | PJM, Audubon, PA

**Mar 2019 - Sept 2019**

- Reduced performance testing duration for in-house applications by 50% via Python and PL/ SQL scripts
- Unit-tested/maintained new application functionalities throughout the agile development lifecycle
- Facilitated SCRUM events by using Confluence/JIRA for quality control and developed design requirements

### Software Engineer Intern | Lem.ma, Inc, Philadelphia, PA

**May 2017- Sept 2017**

- Created 2D plots and graphics for an online education start-up by using Python and JavaScript

## PROJECTS

### DRIVE UP! | Android App @ Play Store (Java)

**June 2020 - July 2020**

- Developed, maintained, and published an android app written in Java to Play Store
- Implemented a machine learning model that can detect driver drowsiness under 80ms with 98% accuracy

### Training Dashboard | Workforce Optimization App

**Apr 2019 - Apr 2020**

- Developed RESTFUL APIs with Postman & SAP XSJS and designed database with SAP HANA & MySQL
- Implemented secure integration with SAP Cloud Platform (Neo) using enterprise integration patterns
- Designed frontend architecture for scalable enterprise using SAP UI5, JavaScript, HTML5, jQuery

### React Feedback Popup | Open Sourced NPM Package (100+ downloads/month)

**Mar 2020 - Apr 2020**

- Developed a production-level React.js component and published to NodeJS Package Manager Platform
- Employed CI/CD via Travis to maintain deployments, handled git pull requests and tested with Jest framework

### Free Food Book | Social Media App

**Jan 2020 - Apr 2020**

- Developed a social media app that lets users find food deals with MongoDB, Node, React, Express and Travis

### Linkify | Personal Brand Management App

**Jan 2020 - Mar 2020**

- Developed a full stack app with MongoDB, Express, React, & NodeJS deployed on Heroku Cloud Platform

### Churn Rate Predictor | Docker Web Application

**Dec 2019 - Mar 2020**

- Created a full stack app with Django, React, MySQL and Docker deployed on Heroku to predict SAP Max Attention customer churn rate with 86% accuracy based on historical data

### HELP UP! | Mental Health Support Platform

**Sept 2019 - Jan 2020**

- Developed a non-emergency anonymous chat platform for people who need help with mental depression
- Created account registration, login, chatrooms, messaging with Firebase, Express, Node.js React and Socket.io

### PageRank Implementation with MapReduce and Hadoop

**June 2019 - July 2019**

- Used MapReduce on Hadoop Distributed File System to implement page rank algorithm

## LEADERSHIP EXPERIENCE

- Drexel Society of AI - Founder & President - Promote AI research, mentor members, facilitate workshops
- Drexel SimpleX – Founder, Editor-In-Chief, Student-run Research Publication Magazine at Drexel University
- DragonHacks (Drexel's very own 24-hour Hackathon) - Committee Member – Organize the hackathon activities
- Resident Assistant 2018 – Facilitate freshman class residency trainings
- Teaching Assistant 2018 - present – Teach Parallel Computing, Deep Learning and AI classes for graduate students
- Drexel STAR Research Scholar; Undergraduate Research Leader; DAAD-Rise Germany Scholar; Drexel A.J Scholar

## PUBLICATIONS

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- Alparslan, Ken, Yigit Alparslan, and Matthew Burlick. "Towards Evaluating Driver Fatigue with Robust Deep Learning Models." arXiv preprint, <https://arxiv.org/abs/2007.08453>
- Alparslan, Ken, Yigit Alparslan, and Matthew Burlick. "Adversarial Attacks against Neural Networks in Audio Domain: Exploiting Principal Components." arXiv preprint, <https://arxiv.org/abs/2007.07001>
- Alparslan, Yigit, Mannika Kshetry, and Louis Kratz. "Towards Evaluating Gaussian Blurring in Perceptual Hashing as a Facial Image Filter." arXiv preprint, <https://arxiv.org/abs/2002.00140>
- Alparslan, Yigit, et al. "Adversarial Attacks on Convolutional Neural Networks in Facial Recognition Domain." arXiv preprint, <https://arxiv.org/abs/2001.11137>
- Alparslan, Yigit, et al. "Perfecting the Crime Machine." arXiv preprint, <https://arxiv.org/abs/2001.09764>
- Schwartz, Daniel, Yigit Alparslan, and Edward Kim. "Regularization and Sparsity for Adversarial Robustness and Stable Attribution.", [https://link.springer.com/chapter/10.1007/978-3-030-64556-4\\_1](https://link.springer.com/chapter/10.1007/978-3-030-64556-4_1)
- Alparslan, Yigit, et al. "Towards Searching Efficient and Accurate Neural Network Architectures in Binary Classification Problems." arXiv preprint, <https://arxiv.org/abs/2101.06511>
- Alparslan, Yigit, Ethan Jacob Moyer, and Edward Kim. "Evaluating Online and Offline Accuracy Traversal Algorithms for k-Complete Neural Network Architectures." arXiv preprint, <https://arxiv.org/abs/2101.06518>
- Alparslan, Yigit and E. Kim. "Robust SleepNets." arXiv preprint, <https://arxiv.org/abs/2102.12555>