

# YIGIT ALPARSLAN

267-690-8405 | [linkedin.com/in/yigit-alparslan](https://www.linkedin.com/in/yigit-alparslan) | <https://ya332.github.io> | [alparslanyigitcan@gmail.com](mailto:alparslanyigitcan@gmail.com) | Seattle, WA

## EDUCATION

- Master of Science in Computer Science, Drexel University, Philadelphia, PA, US, **GPA: 3.97** Sept 2019 - June 2021
- Bachelor of Science in Electrical Engineering, Drexel University, Philadelphia, PA, US, **GPA: 3.97** Sept 2016 - June 2021
- Bachelor of Science in Computer Engineering, Drexel University, Philadelphia, PA, US, **GPA: 3.97** Sept 2016 - June 2021

## WORK EXPERIENCE

### Software Engineer | Microsoft | Redmond, WA (Azure, SQL, REST API) July 2021 - Present

- Developed telemetry infrastructure for Platform Engineering to ensure 99.999% availability for internal finance platform.
- Created a Teams bot to alert the team about production failures and improved acknowledgment duration by 50%.
- Automated incident creation after production failures, which has led to 300% faster recoveries.

### STAR Intern | SAP | Newtown Square, PA (Java, Git, SQL, REST API, JavaScript, Microservices) Apr 2019 - June 2021

- Interned at SAP Multi Cloud Team and saved 5+ million dollars/year by detecting underutilized cloud assets and recommending reservations for overutilized assets through automating internal cloud purchases in AWS, Azure and GCP.
- Interned at SAP Predictive Maintenance Team and developed RESTful APIs to predict failure modes for customer equipment. Developed REST APIs and database schemas used by external customers and increased code coverage by 25%.
- Interned as DevOps Engineer at SAP Multi Cloud Team and developed telemetry platform to ensure 99.999% availability on SAP's AliCloud architecture.
- Interned as UI/UX Developer at SAP Talent Acquisition and Branding Team and programmed jobs.sap.com (10 million+ visits/year) using HTML5, CSS3 and JavaScript.
- Interned as Full-Stack Developer at SAP Center of Expertise and improved interaction counts by 3x for an internal training app (used by 400+ people) by implementing a conversational AI. Delivered a neural network in SAP Cloud Platform to predict SAP cloud customers' churn rate with 86% accuracy.

### Outage Analysis Technologies Coop | PJM | Audubon, PA (Python, Bash, SQL) Apr 2018 - Sept 2018

- Reduced duration for performance testing of in-house applications by 50% via Python and PL/SQL scripts.
- Implemented automated integration tests and increased test code coverage by 18%.
- Facilitated SCRUM events by using Confluence/JIRA for quality control and developed design requirements

## SKILLS

- Python • Java • Spring Framework • C • Git • Docker • HTML • CSS • JavaScript • NodeJS • React • Vue.js • SQL • MongoDB
- NoSQL • Jenkins • GraphQL • RabbitMQ • Travis CI/CD • AWS • AliCloud • Azure • GCP • Django • Firebase • Tableau • Redis

## AWARDS, ACCOLADES AND CERTIFICATIONS

- Drexel Global Scholar, Drexel AI Founder, Honors Degree
- Microsoft Certified: DevOps Engineer Expert, Azure Solutions Architect Expert, Azure Developer Associate
- AWS Cloud Architect Nanodegree
- 2015 National Physics Olympiad Silver Medal Winner, Turkey

## 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

- 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, Edward Kim, "ATRAS: Adversarially Trained Robust Architecture Search", arXiv preprint 2021, <https://arxiv.org/abs/2106.06917>
- Alparslan, Y.; Moyer, E.; Kim, E. Convolutional Stock Market: Using Convolution Operation for Stock Market Prediction. Preprints 2021, 2021040515 (doi: 10.20944/preprints202104.0515.v2).
- E Moyer, J Winchell, I Isozaki, Y Alparslan, M Halac, "Functional Protein Structure Annotation Using a Deep Convolutional Generative Adversarial Network", arXiv preprint 2021, <https://arxiv.org/abs/2104.08969>
- Alparslan, Y., & Kim, E. (2021). "Extreme Volatility Prediction in Stock Market: When GameStop meets Long Short-Term Memory Networks", <http://arxiv.org/abs/2103.01121>
- Alparslan, Yigit and E. Kim. "Robust SleepNets." arXiv preprint 2021, <https://arxiv.org/abs/2102.12555>

- Alparslan, Yigit, Ethan Jacob Moyer, and Edward Kim. "Evaluating Online and Offline Accuracy Traversal Algorithms for k-Complete Neural Network Architectures." arXiv preprint 2021, <https://arxiv.org/abs/2101.06518>
- Alparslan, Yigit "Adversarial Attacks and Robustness in Deep Learning Models and Applications", Drexel University ProQuest Dissertations Publishing, 2021, <https://www.proquest.com/openview/2d3c977cb69f1cef2ffde5b69b5d0505/>
- Schwartz, D., Alparslan, Y., Kim, E. (2020). Regularization and Sparsity for Adversarial Robustness and Stable Attribution. In: , et al. Advances in Visual Computing. ISVC 2020. Lecture Notes in Computer Science(), vol 12509. Springer, Cham. [https://doi.org/10.1007/978-3-030-64556-4\\_1](https://doi.org/10.1007/978-3-030-64556-4_1)
- Alparslan, Ken, Yigit Alparslan, and Matthew Burlick. "Towards Evaluating Driver Fatigue with Robust Deep Learning Models." arXiv preprint 2020, <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 2020, <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 2020, <https://arxiv.org/abs/2002.00140>
- Alparslan, Yigit, et al. "Adversarial Attacks on Convolutional Neural Networks in Facial Recognition Domain." arXiv preprint 2020, <https://arxiv.org/abs/2001.11137>
- Alparslan, Yigit, et al. "Perfecting the Crime Machine." arXiv preprint 2021, <https://arxiv.org/abs/2001.09764>