

Sahin Olut

Github: <https://github.com/norveclibalikei>

Address : 404 Jones Ferry Rd., G20, 27510, Carrboro, NC, USA.

E-mail : olut.sahin@gmail.com

Mobile : +1-919-904-5261

Personal page: olut.xyz

EDUCATION

- **University of North Carolina at Chapel Hill** North Carolina, USA
PhD in Computer Science; Topics: Image Registration, Machine Learning, Computer Vision Sep. 2019 – Present
- **Istanbul Technical University** Istanbul, Turkey
BSc in Computer Engineering and Science (Top %10 of class) Sep. 2014 – June 2019

EXPERIENCE

- **Kairos Future & Dcipher Analytics** Remotely Stockholm, Sweden
Machine Learning Engineer July 2018 - Aug. 2019
 - Developed machine learning and data visualization platform using **Apache Spark, Python** for making AI-supported analytics available to experts without data science or programming experience.
 - Built a machine learning pipeline to diagnose dental x-ray images, which **outperforms human-level**.
 - Visualized thousands of fetched photos from Instagram to show the relations between them and found the hot-spots and trends across the Scandinavia, by utilizing image embeddings.
 - Analyzed the workflows, pipelines and optimized the Apache Spark configurations accordingly.
 - Worked on the design and implementation of user and management microservices.
- **ITU Vision Lab.** Istanbul, Turkey
Undergraduate Research Member Aug. 2017 - Aug. 2019
 - Worked with GANs for medical image generation, I also studied about various tasks ranging from medical image segmentation to enhancing quality of satellite images. Additionally, I worked on development of some internal tools of the lab.
 - **Teaching Assistantship:** Voluntarily prepared assignments and helped the creation of the syllabus for the first-time offered **graduate-level** Deep Learning course which is offered by our lab. At the end of the course, the students built a fully featured deep learning framework.
 - **National Liver Segmentation Hackathon:** In April 2018, Dokuz Eylul University held a Grand Challenge about liver segmentation in MRI images. Ranked **1st** place.
 - **Best graduation project award:** Awarded by ITU Computer Engineering Department.
 - **Best research project award:** Awarded by TUBITAK (Council of Science) for the best project in the Istanbul region.

PROJECTS & OPEN SOURCE CONTRIBUTIONS

- **arXiv.org** Open source contributor for world's largest online manuscript repository.
- **Logger as a Service** A JavaScript library that seamlessly integrates your project and collects the app logs which can be monitored and analyzed. Tech stack: GoLang, Elasticsearch, JavaScript, RabbitMQ, Grafana, React.js, Redis.
- **Zuber Telegram Bot (Freelance)** Allows touring employees of Zuber (zuberlezzetler.com/en/) to take photos and gather other information about grocery shops where Zuber products are sold. The bot has **250+ daily active users**.
- **ITU Enrollment Tracker** Allows students to be notified when there are seats available in a class. It is a chat bot integrated to Facebook Messenger API. Many students (**500+ in 2 days after release**) have used and benefited from app. It was a holiday project but it eventually gained vast attention from students.
- **ITUnder** Peer finder app for study groups. Tech stack: React.js, Python, Flask, PostgreSQL, NodeJS.

PUBLICATIONS

- **Published:**
 - **Sahin Olut**, Yusuf Huseyin Sahin, Ugur Demir, Gozde Unal. (2018) "Generative Adversarial Training for MRA Image Synthesis Using Multi-contrast MRI". In: PRedictive Intelligence in Medicine. PRIME 2018 (**MICCAI 2018 Workshop**). Lecture Notes in Computer Science, vol 11121. Springer, Cham
 - **Sahin Olut**, Yusuf Huseyin Sahin, Ugur Demir, Gozde Unal. "Generative Adversarial Training for MRA Image Synthesis Using Multi-Contrast MRI". International Conference on Medical Imaging with Deep Learning (MIDL), Amsterdam, NL. July 2018. arXiv:1804.04366 – **Awarded with CIFAR Student Travel Grant**

- **On progress/in review:**
 - Emre Kavur, **Sahin Olut**, et al. "Comparison of Semi-Automatic and Deep Learning Based Automatic Methods for Liver Segmentation in Living Liver Transplant Donors". (Output of the challenge: National Liver Segmentation Hackathon) **Submitted to Diagnostic and Interventional Radiology**
 - **Sahin Olut**, Yusuf Huseyin Sahin, Ugur Demir, Gozde Unal. "MRA-GAN: Magnetic Resonance Angiography Synthesis using Generative Adversarial Networks". **Submitted to IEEE Journal of Biomedical and Health Informatics**

HONORS & AWARDS & TALKS

- **DeepCon'18:** Did an introductory workshop about synthetic data generation in DeepCon'18 organized by Deep Learning Turkey.
- **CIFAR Travel Grant:** Granted by CIFAR for the work (Generative Adversarial Training for MRA Image Synthesis Using Multi-Contrast MRI) presented in MIDL 2018.
- **IKU Code Night:** Ranked **2nd** place. It is a 24 hours long online competitive programming challenge.
- **Getir-BiTaksi Hackathon 2018:** Ranked **3rd** place with an app called 'Gotur'. Used Redis, NodeJS, MongoDB.
- Ranked **1756th** among ~ 2M students in 2014's university entrance exam.