

SKILLS	Python (9+ years), Java (4 years), Ruby, C / PostgreSQL / Redis / Docker, Kubernetes / Azure / PyTorch
EXPERIENCE	<p>Microsoft, Istanbul, Turkey (2.5+ years) May 2022 - Present Software Engineer at Azure Cosmos DB for PostgreSQL & MongoDB vCore Team - Tech stack: Ruby / Sinatra / Sidekiq / Redis / Postgres / Docker / Linux / Kubernetes / Azure DevOps - Backend development for the large-scale distributed cloud services of Citus/Postgres & Mongo vCore - Battle-tested by performing live migrations, handling outages, conducting RCAs, and deploying hotfixes - Won Azure Data's QSEP and MSFT Turkey's Security Hero awards for leading FIPS 140-2 migration - Won the Azure Databases Beacon Award for critical customer assistance and infra improvements - Led the AZ outage resiliency initiative that allowed our service to stay online during multiple outages - Reduced cluster provisioning duration from 5 mins to 5 secs on avg for our most popular SKUs - Automated control plane k8s cluster updates and fleet maintenance for fast security vuln management - Completed end-to-end development of cert preprovisioning workflow for OneCert outage resiliency - Co-created our service's unified security/migration/maintenance status dashboards via Azure Data Explorer</p> <p>Max Planck Institute/Uni of Tübingen, Tübingen, Germany (1 year) Jan 2021 - Dec 2021 Research Scientist at Explainable Machine Learning Group - The findings of my research on robust & efficient computer vision are published at CVPRW'22</p> <p>Siemens, Ankara, Turkey (\approx 4 years) Jan 2017 - Nov 2020 Software Engineer at Smart Infrastructure Department - Tech stack: Python / Keras / MariaDB, Java / JavaFX / MSAccess - Backend development and work on AI/ML for anomaly detection/event classification - Initiated deep learning adoption in PQA for predictive maintenance (+17% accuracy) - Improved real-time data processing by replacing server-to-client polling with client initiated connections - 254x avg. speed-up on I/O bound operations via indexing and refactoring the database queries - Designed and developed a new GUI for the transition from Swing to JavaFX</p> <p>Middle East Technical University, Ankara, Turkey Sep 2016 - Dec 2018 M.Sc. in Computer Engineering</p> <p>Middle East Technical University, Ankara, Turkey Sep 2011 - June 2016 B.Sc. in Computer Engineering</p> <p>SELECTED OPEN-SOURCE SOFTWARE</p> <p>MicroExpNet 📄 139 ★ Main Contributor, AI/ML, Python, Tensorflow, 2017 - Codes of our conference paper on a very fast facial expression recognition model</p> <p>ACVC 📄 29 ★ Main Contributor, AI/ML, Python, PyTorch, Matplotlib, 2021 - Codes of our CVPRW'22 paper on single-source domain generalization in computer vision</p> <p>Treelogy 📄 3 ★ Contributor, Backend Development, AI/ML, Java, Python, Caffe, 2016 - Codes of our award-winning (\$1,000) Treelogy mobile app (peak 27,000+ users) and its tech report</p> <p>psykedelic 📄 2 ★ Main Contributor, AI/ML, Python, Keras, Matplotlib, 2020 - Codes of our tech report on convolutional neural net pruning via eigenvalue-based heuristics</p> <p>spike_pstrsv 📄 2 ★ Main Contributor, Parallel Computing, C, OpenMP, Python, Matplotlib, 2019 - Codes of our journal paper that introduced a parallel solver 2.47× faster than Intel MKL 2018's</p>