

SKILLS	Python (9+ years), Java (4 years), Ruby, C / PostgreSQL / Redis / Docker, Kubernetes / Azure / PyTorch
EXPERIENCE	<p><b>Microsoft</b>, Istanbul, Turkey (3+ years) <span>May 2022 - Present</span></p> <p>Software Engineer at Azure Cosmos DB for PostgreSQL &amp; MongoDB vCore Team</p> <ul style="list-style-type: none"> <li>- Tech stack: Ruby / Sinatra / Sidekiq / Redis / Postgres / Linux / Docker / Kubernetes / Azure DevOps</li> <li>- <b>Backend development</b> for the large-scale distributed cloud services of Citus/Postgres &amp; Mongo vCore</li> <li>- Battle-tested by performing live migrations, handling outages, conducting RCAs, and deploying hotfixes</li> <li>- Won Azure Data's <b>QSEP</b> and MSFT Turkey's <b>Security Hero</b> awards for leading FIPS 140-2 migration</li> <li>- Won the <b>Azure Databases Beacon Award</b> for critical customer assistance and infra improvements</li> <li>- Led the <b>AZ outage resiliency</b> initiative that allowed our service to stay online during multiple outages</li> <li>- Reduced cluster provisioning duration <b>from 5 mins to 5 secs</b> on avg for our most popular SKUs</li> <li>- Automated control plane k8s cluster updates and fleet maintenance for fast security vuln management</li> <li>- Completed end-to-end development of cert preprovisioning workflow for <b>OneCert outage resiliency</b></li> <li>- Co-created our service's unified security/migration/maintenance status dashboards via Azure Data Explorer</li> </ul> <p><b>Max Planck Institute/Uni of Tübingen</b>, Tübingen, Germany (1 year) <span>Jan 2021 - Dec 2021</span></p> <p>Research Scientist at Explainable Machine Learning Group</p> <ul style="list-style-type: none"> <li>- The findings of my research on robust &amp; efficient computer vision are <b>published at CVPRW'22</b></li> </ul> <p><b>Siemens</b>, Ankara, Turkey (<math>\approx</math> 4 years) <span>Jan 2017 - Nov 2020</span></p> <p>Software Engineer at Smart Infrastructure Department</p> <ul style="list-style-type: none"> <li>- Tech stack: Python / Keras / MariaDB, Java / JavaFX / MSAccess</li> <li>- <b>Backend development and work on AI/ML</b> for anomaly detection/event classification</li> <li>- <b>Initiated deep learning adoption</b> in PQA for predictive maintenance (+17% accuracy)</li> <li>- Improved real-time data processing by replacing server-to-client polling with client initiated connections</li> <li>- 254x avg. speed-up on I/O bound operations via indexing and refactoring the database queries</li> <li>- Designed and developed a new GUI for the transition from Swing to JavaFX</li> </ul> <p><b>Middle East Technical University</b>, Ankara, Turkey <span>Sep 2016 - Dec 2018</span></p> <p>M.Sc. in Computer Engineering</p> <p><b>Middle East Technical University</b>, Ankara, Turkey <span>Sep 2011 - June 2016</span></p> <p>B.Sc. in Computer Engineering</p> <p><b>SELECTED OPEN-SOURCE SOFTWARE</b></p> <p><b>MicroExpNet</b> 🏆 140 ★ <b>Main Contributor</b>, AI/ML, Python, Tensorflow, 2017</p> <ul style="list-style-type: none"> <li>- Codes of our conference paper on a very fast facial expression recognition model</li> </ul> <p><b>ACVC</b> 🏆 29 ★ <b>Main Contributor</b>, AI/ML, Python, PyTorch, Matplotlib, 2021</p> <ul style="list-style-type: none"> <li>- Codes of our CVPRW'22 paper on single-source domain generalization in computer vision</li> </ul> <p><b>Treelogy</b> 🏆 3 ★ <b>Contributor</b>, Backend Development, AI/ML, Java, Python, Caffe, 2016</p> <ul style="list-style-type: none"> <li>- Codes of our award-winning (\$1,000) Treelogy mobile app (peak 27,000+ users) and its tech report</li> </ul> <p><b>psykedelic</b> 🏆 2 ★ <b>Main Contributor</b>, AI/ML, Python, Keras, Matplotlib, 2020</p> <ul style="list-style-type: none"> <li>- Codes of our tech report on convolutional neural net pruning via eigenvalue-based heuristics</li> </ul> <p><b>spike_pstrsv</b> 🏆 2 ★ <b>Main Contributor</b>, Parallel Computing, C, OpenMP, Python, Matplotlib, 2019</p> <ul style="list-style-type: none"> <li>- Codes of our journal paper that introduced a parallel solver <b>2.47×</b> faster than Intel MKL 2018's</li> </ul>