

Radmir Sultamuratov

👤 radmir.website | ☎ (346) 504 2427 | ✉ sultamuratov.r@gmail.com | 💼 radmir-sultamuratov | 🌐 radmir-s

EDUCATION

University of Houston Ph.D. in Applied Mathematics	Houston, TX 2020 – 2024
Wayne State University M.S. in Mathematics	Detroit, MI 2018 – 2020
Kazakh National University B.S. in Mathematics	Almaty, Kazakhstan 2005 – 2009

WORK EXPERIENCE

University of Houston Graduate Research - Part time	Houston, TX 2021 – present
<ul style="list-style-type: none">• Mitral valve segmentation in time series of 2D MRI images using TensorFlow, OpenCV, and etc.• Image registration of MRI/echocardiography (Dicom, Nifti) images using Matlab, Python, ANTs• Achieved 97.5% accuracy on cardiac diagnosis classification using Diffeomorphic Registration and Random Forest• Implemented DL models as VoxNet, PointNet, Autoencoders for analysis of 3D MRI images• Performed image processing tasks, including coarsening, refinement, inpainting, PCA alignment, ICP registration.	
Aikynetix Machine Learning Engineer - Internship	Houston, TX Summer 2022
<ul style="list-style-type: none">• Built an API for face detection and face tracking application using MMpose and OpenFace toolboxes• Automated and standartized ML model retraining pipeline on GCP/VertexAI cloud machine• Tested and integrated pose and object detection models, such as ResNet, YOLOv, and TCFormer, into the application• Built and trained custom NN model for physical parameter estimation with 98% hold-out accuracy using PyTorch	
Securian Financial Quantitative Research - Internship	Minneapolis, MN Summer 2020
<ul style="list-style-type: none">• Implemented quadratic interpolation for Delta/Rho variables producing 3-5% rel.error of approximation• Worked on solutions of reducing the computational cost of the Greeks estimation for intra-day options trading	
Innovation High School Math Instructor, Competitive Coach - Full time	Almaty/Aqtau, Kazakhstan 2009 – 2018
<ul style="list-style-type: none">• Taught regular and competitive disciplines such as Number Theory, Combinatorics, Projective Geometry, etc.• Aided 100+ students in achieving accolades on national/international competitions• Received an Honorable Mention from the Minister of Education	

PUBLICATIONS

1. *Automatic classification of deformable shapes*, doi:[10.48550/arXiv.2211.02530](https://doi.org/10.48550/arXiv.2211.02530)
H. Dabirian, R. Sultamuratov, J. Herring, C. El-Tallawi, W. Zoghbi, A. Mang, R. Azencott
2. *Maximum Matchings in Rectangle*, [gs-citation](#); [pdf](#)
A. Dzhumadil'dayev, R. Sultamuratov

SKILLS

Programming: Python, Matlab, C++, R

Frameworks/Software: PyTorch, TensorFlow/Keras (*Certified*), opencv, pandas, sci-kit, spark, sql, git, SLURM, ssh/bash, GCP, docker, vscode remote, omp, multiprocessing, ANTs, labelme, slicer

Relevant coursework: Optimization, Probability & Statistics, Spatial Modelling, Numerical Methods, Deep Learning, Data-Driven Algorithms, Statistical Data Analysis, High-Performance Computing, Linux/Cluster Computing