Georgy Savva

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RESEARCH INTERESTS

Multimodal Learning, Representation Learning, Image Generation, Reinforcement Learning, Intelligent Agents

EDUCATION

New York University   New York, United States

Master of Science in Computer Science, Courant Institute of Mathematical Sciences. GPA: 3.8   *2024 – Expected 2026*

Relevant courses: Computer Vision

Russian University of Cooperation   Moscow, Russia

Bachelor of Science in Computer Science   *2019 – 2021*

National Research Nuclear University MEPhI   Moscow, Russia

2 years toward Bachelor of Science in Computer Science   *2014 – 2016*

RESEARCH EXPERIENCE

Graduate Research Assistant   Jun 2024 – Present

NYU Courant Institute of Mathematical Sciences, Advised by Prof. Lerrel Pinto   *New York, United States*

- Setup an auto-resettable reinforcement learning environment for online robot training using the spacemouse device
- Applied online reinforcement learning to fix the human demonstration morphology gap for dexterous robotic manipulation
- Trained a behavior cloning policy using transformers on third-person human demonstration data to solve dexterous robotic hand tasks

PUBLICATIONS

1. *HuDOR: Bridging the Human to Robot Dexterity Gap through Object-Oriented Rewards*
   I. Guzey, Y. Dai, **G. Savva**, R. Bhirangi, L. Pinto.
   ICRA 2025 (Under Review). Website

PROJECTS

Advantage Actor-Critic with Optuna   Jun 2024 – Aug 2024

Trained a reinforcement learning agent with Optuna for the HalfCheetah env, achieving a 24% better performance than the best publicly available policy. Website

Transformer-Based Diffusion for Game Generation   Sep 2024 – Dec 2024

Trained a transformer diffusion model to simulate DOOM trajectories. In the teacher-forcing setting, it achieves a PSNR of 32.21, producing quality indistinguishable from the ground truth. Website

Open-Source Library Scany   May 2020 – Present

Created an open-source library to map data from a database into Go objects. The library has 1,300 stars on GitHub and is used by thousands of companies. GitHub

INDUSTRY EXPERIENCE

Senior Software Engineer   Oct 2023 – May 2024

Raylu   *New York, United States*

- Led the development of the backend of an LLM-powered Q&A chatbot for healthcare and deployed it to production to serve the first paying customers
- Developed an LLM-powered SaaS workflow automation application using the open source workflow engine activepieces, allowing the company to release a new product in under 3 months

Technical Co-Founder   Jul 2022 – Aug 2023

Scifind   *Los Angeles, United States*

- Launched a troubleshooting platform for bioscientists into production, gaining 4,000 MAU in the first 2 months
- Led the development of the product with a team of 2 engineers using TypeScript, Next.js, and Node.js

Senior Software Engineer   Jan 2021 – Jul 2022

IOTA   *Berlin, Germany*
- Developed a new network layer of the blockchain node using libp2p, decreasing the number of peering errors by 70%
- Set up automatic deployment via Ansible and GitHub Actions, accelerating the development speed by 25%
- Introduced Go guidelines to the project and tools to ensure them, reducing the frequency of bugs by 50%

Senior Software Engineer   Jan 2020 – Jan 2021

Elsa   *San Francisco, United States*
- Implemented App Store and Google Play in-app subscriptions as microservices using FastAPI, which improved the correctness of billing by 50%
- Integrated payment gateway Instamojo, increasing the number of app purchases in Asia threefold

Software Engineer   Mar 2017 – May 2019

Edwin.ai   *San Francisco, United States*
- Participated in building the English tutor chatbot from a prototype stage to being the top 1 bot on Facebook
- Implemented a YAML-file-based framework for building dialog systems, which allowed the company to launch a new product on Google Assistant
- Designed a distributed queue using PostgreSQL to handle messages from 800,000 users
- Developed the user knowledge graph service using Neo4j, improving the performance of read queries threefold

Software Engineer   Jun 2016 – Mar 2017

Snaappy   *Moscow, Russia*
- Rewrote the messaging service in Go, which increased the backend performance fivefold
- Migrated the chat storage from PostgreSQL to MongoDB, allowing horizontal scalability for the data layer
- Implemented a Websocket service for real-time updates using Go, driving user engagement by 30%

Skills

Languages: Python, SQL, Go, TypeScript
Libraries: PyTorch, Gym, Optuna, TensorFlow, Numpy, Pandas, FastAPI, React, Node.js
Tools: Docker, Kubernetes, PostgreSQL, AWS, GraphQL, Hasura

Certifications

Probability & Statistics for Machine Learning & Data Science   Sep 2024

DeepLearning.AI, GPA: 93/100

Improving Deep Neural Networks   Jun 2023

DeepLearning.AI, GPA: 98/100

Neural Networks and Deep Learning   May 2023

DeepLearning.AI, GPA: 97/100

YC Summer Startup School   Aug 2022

Y Combinator

Intro to Machine Learning   Jul 2022

Kaggle

Mathematics for Machine Learning: Multivariate Calculus   Dec 2021

Imperial College London, GPA: 96/100

Mathematics for Machine Learning: Linear Algebra   Dec 2021

Imperial College London, GPA: 96/100