rmando Teles Fortes

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Education

Tsinghua University Beijing, China M.Sc. in Computer Science and Technology Sept 2021 - Present Advised by Prof. Jun Zhu, Tsinghua SAIL Group, Institute for AI. Perfect GPA of 4.00/4.00. Rank: 1/70. Instituto Superior Técnico, University of Lisbon Lisbon, Portugal B.Sc. in Computer Science and Engineering Sept 2018 - July 2021 • Graduated with GPA of 17/20 (Grade A or Muito Bom). Experience _____ **Tsinghua University** Beijing, China Student Researcher Sept 2022 - Present • Advised by Prof. Jun Zhu, Tsinghua SAIL Group, Institute for Artificial Intelligence. • Working on deep generative models, particularly text-to-image diffusion models for controllable generation. Actively involved in cutting-edge research, enhancing skills in machine learning and advanced problem-solving. **Carnegie Mellon University** Pittsburgh PA, USA (Remote) **Research Intern** Sept 2021 - Feb 2023 • Guided by Prof. Zhiting Hu and Prof. Eric Xing, SAILING Lab, Machine Learning Department. • Engaged in innovative research on application of reinforcement learning in the language model prompt space (within RLPrompt framework). Investigated language models' internal dynamics for enhanced output predictability and control. **Amazon Web Services** Dublin, Ireland Software Development Engineer Intern June 2022 - Sept 2022 • Developed key software components in Amazon RDS using Ruby on Rails. • Integrated Amazon RDS with Service Quotas in a cross-functional team environment, improving system efficiency. · Led a major project from concept to global rollout, directly enhancing user experience for AWS customers.

Publications_

Chendong Xiang*, Armando Fortes*, Khang Hui Chua, Hang Su, Jun Zhu. FeedFace: Efficient Inference-based Face Personalization via Diffusion Models. In Tiny Papers @ International Conference on Learning Representations (ICLR), 2024.

* indicates co-first authors.

Selected Projects

Efficient and Reliable Text-to-Image Generation (高效可靠的文生图方法) Guangzhou, China Guangdong-HK-Macao Greater Bay Area Intl. Algorithm Competition (1st out of 599 teams) July 2023 - Dec 2023 Introduced a novel inference-based method designed to augment text-to-image diffusion models with face-based conditional generation. **Image Matching Challenge** Beijing, China CVPR 2022 - Kaggle Competition Silver Medal (34th out of 642 teams) Mar 2022 - July 2022 Applied state-of-the-art methods in local feature matching, leveraging strengths from detector-based and detector-free approaches. **TMALL Repeat Buyers Prediction** Beijing, China Alibaba Cloud Tianchi Competition Top-0.7% solution (51st out of 6803 teams) Sept 2021 - Dec 2021 • Performed key feature extraction from raw user behavior logs. Applied gradient boosting methods and designed subsequent ensemble model. Honors and Awards 2023 Guangdong-HK-Macao Greater Bay Area Intl. Algorithm Competition Champion, Pazhou Lab Guangzhou, China 2022 Chinese Government Scholarship (M.Sc.), Tsinghua University Beijing, China 2021 Academic Excellence Award, Instituto Superior Técnico, University of Lisbon Lisbon, Portugal

2020 Academic Merit Award, Instituto Superior Técnico, University of Lisbon Lisbon, Portugal

Service

VolunteerICLR (2023)TeachingProgramming Instructor at TreeTree2 (2022)

Skills.

LanguagesPortuguese (Native), English (Fluent, C1), Spanish (Proficient), Mandarin Chinese (Basic, HSK2)ProgrammingPython, Java, Ruby, JavaScript/TypeScript, C/C++, Prolog, Bash/Shell ScriptingMachine LearningPytorch, Transformers, Diffusers, Accelerate, TensorFlow, Keras, Scikit-learn, NumPy, Pandas, WandBMiscellaneousAWS, AWS Cloud Development Kit (CDK), SQL, NoSQL (DynamoDB, MongoDB), Hadoop DFS