Jamshidbek Mirzakhalov

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EDUCATION

UNIV. OF SOUTH FLORIDA

MS IN COMPUTER SCIENCE WITH THESIS Aug 2020 - Aug 2021 | Tampa, FL Cum. GPA: 3.6

UNIV. OF SOUTH FLORIDA

BS IN COMPUTER SCIENCE | HONORS College

Aug 2016 - Aug 2020 | Tampa, FL Cum. GPA: 3.8

SELECTED PUBLICATIONS & PATENTS

[1] Mirzakhalov, J., Babu, A., Wahab, A., et al. (2021). Evaluating Multiway Multilingual NMT in the Turkic Languages. To appear at the Proceedings of Workshop on Machine Translation (WMT) 2021.

[2] Mirzakhalov, J., Babu, A., Ataman, D., et al (2021). Large-scale Study of Machine Translation in the Turkic Languages. To appear at the main Proceedings of EMNLP 2021.

[3] Caswell, I., Kreutzer, J., Wang, L., ... Mirzakhalov, J., et al (2021). Quality at a Glance: An Audit of Web-crawled Multilingual Datasets. AfricaNLP 2021@ EACL.

[4] Laverghetta, A., Nighojkar, A., Mirzakhalov, J., and Licato, J. (2021). Can Transformer Language Models Predict Psychometric Properties? Proceedings of *SÉM 2021: The Tenth Joint Conference on Lexical and Computational Semantics, Pages 12-25.

[5] Chellappan, P., Minakshi, M., Kariev, S., McClinton, W. and Mirzakhalov, J., University of South Florida, 2021. Systems and methods of entomology classification based on extracted anatomies. U.S. Patent 11,048,928

[6] Chellappan, S., Bharti, P., Minakshi, M., McClinton, W. and Mirzakhalov, J., University of South Florida, 2021. Leveraging smart-phone cameras and image processing techniques to classify mosquito genus and species. U.S. Patent 10,963,742.

[7] Laverghetta Jr, A., Mirzakhalov, J., and Licato, J. (2020). Towards a Task-Agnostic Model of Difficulty Estimation for Supervised Learning Tasks. In Proceedings of the 1st Conference of AACL-IJCNLP SRW.

[8] Minakshi, M., Bharti, P., McClinton III, W. B., Mirzakhalov, J., Carney, R. M., and Chellappan, S. (2020). Automating the surveillance of mosquito vectors from trapped specimens using computer vision techniques. In Proceedings of the 3rd ACM SIGCAS Conference on Computing and Sustainable Societies.

LEADERSHIP

TURKIC INTERLINGUA (TIL) FOUNDER & COMMUNITY ORGANIZER Sep 2020 - Present | Global

- A community of researchers with a mission to build language technologies around the Turkic languages
- Led a team of 30+ on the creation of public datasets and development NLP models for Machine Translation [1,2]

SOCIETY OF COMPETITIVE PROGRAMMERS | Co-founder & President Jan 2018 - Dec 2019 | Tampa, FL

- Created a student organization that helps to foster hackathon culture at USF and supports students in their hackathon trips
- Reached 350+ active members in 3 semesters and enabled 150+ students experience their first hackathons.

SELECTED RESEARCH EXPERIENCES

ADVANCING HUMAN AND MACHINE REASONING LAB | RESEARCH ASSISTANT Dec 2019 - Present | Tampa, FL

Under the supervision of Dr. John Licato, studied the application of foundation models in psychometrics as a way to reduce costs in empirical human studies [4]. Further, we explored the use of task-agnostic methods for difficulty estimation in the context of natural language inference tasks [7].

SOCIAL COMPUTING LAB | RESEARCH ASSISTANT

Jan 2018 - Present | Tampa, FL

Worked with **Dr. Sriram Chellappan** in a team of 4 to develop a deep learning framework for mosquito genus and species classification [6,8] through automatic anatomy extraction [5]. More recently, we have studied the effect of peer-generated (from college students) data on the empathy of generative models (i.e. chatbots).

INDUSTRY EXPERIENCE

SALESFORCE SOFTWARE ENGINEERING INTERN May 2020 - Aug 2020 | San Fransisco, CA

- Developed, tested and deployed features for the emerging Salesforce Blockchain Platform (BCP)
- Prototyped an OData-based module that integrates the core concepts of blockchain and GDPR compliant storage solutions

IBM RESEARCH | Undergraduate Research Intern May 2019 - Aug 2019 | Yorktown Heights, NY

- Automated the deployment of AML and time-series prediction models to cloud environment using Docker and K8
- Prototyped mobile app features in Android Studio for the Financial Services Research team

COMMUNITY SERVICE

Program Committee - Workshop on Multilingual Representation Learning (MRL)

Secondary Reviewer - AAAI 2021

Secondary Reviewer - NAACL-HLR Student Research Workshop 2021

HONORS & AWARDS

- 2021 Best Student Paper Award on Computational Psychometrics at IMPS 2021
- 2021 11th Lisbon Machine Learning Summer School Program Admittee
- 2020 Top 50 Inspirational Hackers of 2020
- 2020 Dean's List (4x)
- 2019 USF Chair's Scholarship
- 2019 Honors Community Engagement Scholarship
- 2016 USF Green & Gold Presidential Scholarship (\$48,000)

HACKATHON AWARDS

- 2020 Sponsor Prize (Duv Duv Gap), HackGT 7, Georgia Tech
- 2019 Sponsor Prize (Tutor++), HackGT 6, Georgia Tech
- 2019 Theme Prize (Tutor++), PennApps X, Univ. of Pennsylvania 2019 2nd Overall Prize (Food4Grabs), Hack-A-Bull, USF
- 2019 1st Overall Prize (Classroom.ai), KnightHacks, UCF
- 2018 Sponsor Prize (YacPack), CalHacks, UC Berkeley