REZA KHAN MOHAMMADI

 $+1(517)428-2080 \diamond khanreza@msu.com \diamond \bigcirc \diamond \bigcirc \diamond$

EDUCATION

Michigan State University

Fall 2022 - Present

· Ph.D. Computer Science, GPA: 3.9

University of Guilan

Sep 2017 - Aug 2021

· B.Sc in Computer Engineering, GPA: 18.36/20 (3.86/4)

Thesis: Prose2Poem: The blessing of Transformers in Translating Prose to Persian Poetry

RESEARCH ASSISTANT EXPERIENCES

- Human Augmentation and Artificial Intelligence Laboratory AI Researcher @ HAAIL - under supervision of Dr. MM. Ghassemi

Jul 2021 - Present

Projects: • Feature Imitating Networks • Startup Success Prediction • Cancer Symptom Extraction

• Fetal Biological Sex Identification • Basketball Game Outcome Prediction

- Georgia Southern University

Mar 2020 - Jun 2020

NLP Researcher (Volunteer) - under supervision of Dr. M. Allahyari

Projects: • Document ranking using Transformers

- Guilan NLP Group

Sep 2019 - Present

NLP Researcher - under supervision of Dr. S. A. Mirroshandel

Projects: \bullet Bilingual Image Captioning \bullet Text Style Transfer \bullet Poetry Generation \bullet Abstractive Summerization \bullet Text Style Transfer

ENTREPRENEURIAL EXPERIENCE

GamerTag

· Co-Founder & Chief Data Officer

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Fall 2022 - Present Klagenfurt, Austria

TECHNICAL STRENGTHS

Technical Expertise Artificial Intelligence, Deep Learning,

Machine Learning, Natural Language Processing,

Signal Processing

Non-Technical Expertise Innovation, Leadership, Management,

Problem Solving, Public Speaking

Programming Languages C/C++, Java, MATLAB, Python, VHDL

Web Development Tools CSS, Django, HTML

Data Science Tools

Jupyter Notebook, Numpy, Pandas, scikit-learn, SQL

Hugging Face, Keras, PyCharm, PyTorch, Tensorflow

Cloud Computing Tools Amazon AWS, Microsoft Azure

RESEARCH PAPERS

The Broad Impact of Feature Imitation: Neural Enhancements Across Financial, Speech, ♂ and Physiological Domains - (Under Review) R. Khanmohammadi, T. Alhanai, MM. Ghassemi Science Impacts Industry: Investigating the Relationship Between Scientific Advancements and Industrial Funding - (Under Review) R. Khanmohammadi, S. Kaur, C. H. Smiley, T. Alhanai, A. Nourbakhsh, I. Brugere, MM. Ghassemi A Primer on Modern Natural Language Processing Techniques and Roadmap to Clinical use in Radiation Oncology - (Under Review) R. Khanmohammadi, MM. Ghassemi, K. Verdecchia, A. I. Ghanem, L. Bing, I. J. Chetty, H. Bagher-Ebadian, F. Siddiqui, M. Elshaikh, B. Movsas, K. Thind A Novel Learning Approach for Training Transformer-Based Natural Language Processing Pipeline to Extract Toxicity Symptoms in Prostate Cancer Patients after Definitive Radiotherapy - (Published) R. Khanmohammadi, MM. Ghassemi, AI. Ghanem, M. Elshaikh, K. Verdecchia, I.J. Chetty, K. Thind MambaNet: A Hybrid Neural Network for Predicting the NBA Playoffs - (Under Review) R. Khanmohammadi, S. Saba-Sadiya, S. Esfandiarpour, T. Alhanai, MM. Ghassemi Fetal Gender Identification using Machine and Deep Learning Algorithms on Phonocardiogram Signals - (Under Review) R. Khanmohammadi, MS. Mirshafiee, MM. Ghassemi, T. Alhanai Prose2Poem: The blessing of Transformers in Translating Prose to Persian Poetry -(Published) R. Khanmohammadi, MS. Mirshafiee, YR. Jouryabi, SA. Mirroshandel COPER: a Query-adaptable Semantics-based Search Engine for Persian COVID-19 Arti**cles** - (Published) R. Khanmohammadi, MS. Mirshafiee, M. Allahyari PGST: a Persian Gender Style Transfer method - (Published) R. Khanmohammadi, SA. Mirroshandel Text Style Transfer in Persian Language using Deep Learning R. Khanmohammadi, SA. Mirroshandel **HONORS & AWARDS** Most Active Committee chair Oct 2021 University of Guilan Exceptional Undergraduate Student Talent Aug 2020 University of Guilan **Active Student Ambassador** Jan 2020 International University Sports Federation (FISU) National Representative Aug 2019 National University Sports Federation of I.R. Iran Full Scholarship, B.Sc, University of Guilan Aug 2017 University of Guilan

LEADERSHIP EXPERIENCES

Basics of Computer and Programming

Specialized English for engineering students

Instructor: Dr. SM. Shekarian

Instructor: Dr. M. Shakeri

Rasht School of AI Leader	$egin{array}{c} { m Dec} \ 2020 \ { m - \ Present} \ { m \it Rasht}, \ { m \it Iran} \end{array}$
Brain and Cognition Association of the Universi Head of Artificial Intelligence Committee	ty of Guilan Oct 2020 - Present $Rasht, Iran$
Scientific Association of the Computer Engineer: Head of Research Affairs	ing Department Oct 2020 - Present $Rasht, Iran$
National Olympiad Volunteer committee Vice-Chairman	Sep 2019 - Present $Rasht, Iran$
International University Sports Federation (FISU Iran's FISU Student Ambassador	U) Sep 2019 - Sep 2020 <i>Iran</i>
VOLUNTEERING EXPERIENCES	
Mentorship School of AI	Dec 2020 - Present
Web Application Physical education and Sport Sciences faculty of the Ur	Fall 2017 niversity of Guilan Rasht, Iran
TEACHING ASSISTANT EXPERIENCES	
Deep Learning Instructor: Dr. SA. Mirroshandel	Spring 2022 Head TA
Natural Language Processing Instructor: Dr. Y. Boreshban	Spring 2021 Head TA
Computational Intelligence Instructor: Dr. A. Turani	Spring 2020 / Fall 2020 / Spring 2021 $Head\ TA$
Language Theories and Automata Instructor: Dr. SM. Shekarian	$\begin{array}{c} \text{Spring 2020} \\ TA \end{array}$
Data Structures and Algorithm Design Instructor: Dr. SA. Mirroshandel	Fall 2019 Head TA
Advanced Programming Instructor: Dr. SA. Mirroshandel	$\begin{array}{c} \text{Spring 2019} \ / \ \text{Fall 2019} \\ \textit{Head TA} \end{array}$

Fall 2018

Spring 2018

TA

TA

CERTIFICATIONS

- ***** Certificate of Oral Presentation International Conference on Web Research (ICWR) May 2021
- * Artificial Intelligence School Institute for Research in Fundamental Sciences Aug 2020
- # FISU Student Ambassador International University Sports Federation (FISU) Sep 2019
- * Neuroscience, Cognitive Sciences and Philosophy Summer School Sharif University of Technology Sep 2019
- **Deep Learning Specialization** Coursera, Instructor: Andrew Ng Aug 2019
- # Machine Learning Course Coursera, Instructor: Andrew Ng May 2019
- # Introduction to Data Science in Python Course Coursera, Instructor: Christopher Brooks Apr 2019
- # Basketball Coaching License Iran Basketball Federation Apr 2019
- # Python Advanced Course University of Tehran Aug 2018
- # Web Development Specialization Tehran Institute of Technology Jul 2016

LANGUAGES COMPETENCIES

Persian: Native English: Fluent German: Intermediate

REFERENCES

Dr. Mohammad M. Ghassemi

Michigan State University

ghassem3@msu.edu

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- · Assistant Professor
- · National Scholar of Data and Technology Advancement, National Institutes of Health
- · Founder, Ghamut Corporation
- · Research Affiliate, Massachusetts Institute of Technology

Dr. Tuka Alhanai

New York University - Abu Dhabi

tuka.alhanai@nyu.edu

- · Assistant Professor
- · co-Founder, Ghamut Corporation
- · Research Affiliate, Massachusetts Institute of Technology

Dr. Kundan Thind

Henry Ford Health System

kthind1@hfhs.org

· Vice Chair of Academics, Radiation Oncology

Dr. Seyed Abolghasem Mirroshandel

University of Guilan

mirroshandel@guilan.ac.ir

· Associate Professor

· Head of the Computer Engineering Department

· Research And Development Manager at AVID Technology Development