

# Joshua Shay Kricheli

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## Occupational Experience

<b>Neuro-Symbolic AI Research Associate</b> <i>Arizona State University (ASU)</i>	<b>Tempe, Arizona, USA</b> <i>2023-Present</i>
Neuro-symbolic AI, Computer Vision, Knowledge Representation, Rule Learning, Information Retrieval, Optimization	
<b>Vice President Data Science</b> <i>Frenn Analytics</i>	<b>Tel Aviv, Israel</b> <i>2022</i>
Founding the Data Science department at the HR-Tech focused start-up company in its early stages using Various AI methods	
<b>AI/ML Researcher and Teaching Assistant</b> <i>Ben-Gurion University of the Negev (BGU)</i>	<b>Beer Sheva, Israel</b> <i>2020-2023</i>
Game Theory, Control Theory, Dynamical Systems, Matrix Differential Equations, Optimization	
<b>Data Scientist</b> <i>Dell Technologies</i>	<b>Beer Sheva, Israel</b> <i>2019-2022</i>
Natural Language Processing, Computer Vision, Knowledge Representation, Data Analysis, Data Visualization, ML Pipelining	
<b>Computer Chips Manufacturing Process Engineer</b> <i>Intel Corporation</i>	<b>Kiryat Gat, Israel</b> <i>2018-2019</i>
Dynamical Systems, Time Series Analysis, Numerical and Statistical Methods, Optimization	

## Education

<b>2023-2027 - Philosophy Doctor (Ph.D.), Computer Science</b> <i>Neuro-symbolic AI V2 Lab, advised by Prof. Paulo Shakarian</i>	<b>Arizona State University, Tempe, Arizona, USA</b> <i>Current GPA: 4.0/4.0, Expected graduation in 2027</i>
<b>2019-2022 - Master of Science (M.Sc.), Computer Science</b> <i>AI Major, advised by Prof. Gera Weiss and Prof. Shai Arogeti</i>	<b>Ben-Gurion University of the Negev, Israel</b> <i>Graduated, GPA: 92.26/100, Thesis grade: 94/100</i>
<b>2014-2018 - Bachelor of Science (B.Sc.), Mechanical Engineering</b> <i>Control Systems, Mechatronics and Robotics Major</i>	<b>Ben-Gurion University of the Negev, Israel</b> <i>Graduated, GPA: 84.74/100, Senior GPA: 89.52/100</i>

## Publications

<b>Conference Article, 1st Author; ACM CIKM 2024, Boise, Idaho, USA</b> <i>Error Detection and Constraint Recovery in Hierarchical Multi-Label Classification without Prior Knowledge</i>	<i>2024</i>
Joshua Shay Kricheli, Khoa Vo, Aniruddha Datta, Spencer Ozgur and Paulo Shakarian	
<b>M.Sc. Thesis</b> <i>Differential Games for Compositional Handling of Competing Control Tasks</i>	<i>2022</i>
<b>Conference Article, 1st Author; IEEE MED 2021, Bari, Italy</b> <i>Composition of Dynamic Control Objectives Based on Differential Games</i>	<i>2021</i>
Joshua Shay Kricheli, Dr. Aviran Sadon, Prof. Shai Arogeti, Shimon Regev and Prof. Gera Weiss	
<b>B.Sc. Final Engineering Project - Awarded A Certificate of Excellence</b> <i>SNIC Bifurcation and its Application to MEMS, advised by Dr. Oriiel Shoshani</i>	<i>2018</i>

## Selected Fellowships, Scholarships, Affiliations and Awards

<b>Ph.D. Galileo Project Affiliate, Center for Astrophysics, Harvard University</b> <i>Employing AI in the systematic scientific search for evidence of extraterrestrial technological artifacts</i>	<i>2024-Present</i>
<b>Ph.D. 'Global Security Initiative' Full 4-Year Fellowship</b> <i>ASU fellowship for security-focused research improving capabilities for high-profile national security</i>	<i>2023-Present</i>
<b>M.Sc. 'Israel Data Science Initiative' &amp; German 'Helmholtz Data Science Academy' Funded Exchange Program</b> <i>Deep Science research at 'Deutsches Zentrum für Luft und Raumfahrt' (DLR) - German Aerospace Center</i>	<i>2022</i>
<b>M.Sc. 'Israeli Smart Transportation Research Center' ('ISTRC') Excellence Scholarship</b> <i>Technion and Bar-Ilan program with Israel's Prime Minister's Office and Council for Higher Education</i>	<i>2020-2021</i>
<b>M.Sc. 'Agricultural, Biological and Cognitive' ('ABC') Robotics Full 2-Year Fellowship</b> <i>BGU fellowship for innovative robotics masters research students admitted as teaching assistants</i>	<i>2019-2021</i>
<b>B.Sc. 'Education for Excellence' 1-Year Fellowship</b> <i>Israeli foundation for educating unequally represented children toward academic and personal excellence</i>	<i>2015-2016</i>
<b>B.Sc. 'Israel Scholarship Education Foundation' ('ISEF') 3-Year Full Fellowship</b> <i>Academic excellence and leadership fellowship funded by investors from the United States</i>	<i>2014-2017</i>
<b>B.Sc. Tel-Aviv University (TAU) 4-Year Full Scholarship</b> <i>Full engineering degree academic scholarship granted by Tel-Aviv University, Israel</i>	<i>2014-2018</i>
<b>B.Sc. Israeli Ministry of Education 2-Year Scholarship</b> <i>Bachelor students funding program issued by the Education Ministry office in the Israeli government</i>	<i>2014-2016</i>
<b>Pre-Engineering 'Achievements for Hi-Tech' Program Full 1-Year Fellowship</b> <i>Israeli government funding program for excellent honorably discharged soldiers from the IDF</i>	<i>2013-2014</i>

*Last compiled: November 30<sup>th</sup>, 2024*