ARISTIDES MILIOS

7-7512 Av. Champagneur | Montreal, Canada H3N 2J9 | +1 (902) 579-0324 | aristides.milios@gmail.com | atmilios.com | Greek and Canadian citizen

SKILLS & ABILITIES

– deep learning and neural networks, specifically large pre-trained language models (BERT, RoBERTa, GPT series)
– entrepreneurship and innovation (through personal startup, SHAD, Stanford's University Innovation Fellows Program, and presidential role in Dalhousie Entrepreneurship Society)
– full-stack web design and web system architecture (Python, React, PostgreSQL)

EXPERIENCE

Research Assistant, Dalhousie University   January 2021 – September 2021

Halifax, Canada

– Worked as Research Assistant for Dr. Luis Torgo and Dr. Stan Matwin
  o with Dr. Luis Torgo, researching healthcare-related time series clustering and classification with gradient-boosted trees
  o with Dr. Stan Matwin, researching large pre-trained language models and the societal risks they pose (resulted in survey paper, see Publications)

Teaching Assistant, Dalhousie University   September 2020 – May 2021

Halifax, Canada

– Worked as Teaching Assistant for the Faculty of Computer Science
  o CSCI 3162 Digital Media with Dr. Dirk Arnold (Winter 2021)
  o CSCI 3141 Foundations of Data Science using R with Dr. Luis Torgo (Fall 2020)
  o CSCI 2170 Server-side Scripting with Dr. Bonnie MacKay (Fall 2020)
  o CSCI 2141 Intro to Database Systems with Dr. Khurram Aziz (Fall 2020)

Research Intern, Know-Center GmbH   September 2019 – January 2020

Graz, Austria

– Third co-op work term of degree at Dalhousie
– Researched Active Learning techniques for Recommender Systems, RNNs with Attention
– Worked on existing research project "RiskID", wrote an ML backend in Keras, implemented an Attention-based visualization and an Active Learning-based mode of function
– Helped design a user study to evaluate the effectiveness of the changes to the tool

Research Intern, MarineTraffic   May – August 2018, January – May 2019

Athens, Greece

- In the context of a research collaboration between the Institute for Big Data Analytics at Dalhousie University and MarineTraffic Inc, did research involving fusion of AIS data streams and radar and optical-based satellite imagery for better maritime awareness
- First and second co-op work terms as part of degree at Dalhousie
- Resulted in presentation at CTFG workshop in Ottawa, a full paper at FUSION 2019 Conference, and a presentation at the Maritime Situational Awareness Workshop in La Spezia, Italy. See Academic Publications for further details.

EDUCATION

McGill University, M.Sc. in Computer Science   September 2021 – Present

Montreal, Canada

- Accepted to the M.Sc. program under Dr. Siva Reddy, to research knowledge-enhanced large pre-trained language models
- Current GPA of 4.0/4.0

Dalhousie University, Bachelor of Computer Science   September 2016 – August 2020

Halifax, Canada

- GPA 4.12/4.3, graduated in top 10% of class
- Graduated with First Class Honours (First Class for GPA above 3.7 in all core Computer Science classes), wrote Honours Thesis on more compact BERT sentence embeddings
- Achieved Sexton Scholar designation (GPA above 3.85 in Engineering, CS, and Architecture faculties) in all years of study
- Did 3 co-op placements (internships) as part of degree (two at MarineTraffic in Athens, Greece; one at Know-Center in Graz, Austria)
- Entrepreneurial Skills Certificate, given by the Centre for Entrepreneurship Education and Development, through the Entrepreneurial Skills Program (ESP) at Dalhousie

LEADERSHIP

VP Finance, McGill Computer Science Graduate Society   December 2021 – Present

Montreal, Canada

- Presiding over the Society's finances and budget
- Redesigned the Society's website (https://csgs.cs.mcgill.ca)

Co-President, Dalhousie Entrepreneurship Society   January 2018 – August 2020

Halifax, Canada

- Co-president of DES, inherited from previous Dalhousie University Innovation Fellows, ran series of workshops to introduce students to fundamental entrepreneurship and design thinking concepts

University Innovation Fellow, Dalhousie October 2017

Halifax, Canada and Sunnyvale, California

– Passed through rigorous 2-month online training, then 4-day conference in Silicon Valley (Stanford Campus and Google headquarters) to meet other Fellows from around the world

Shad Valley Fellow July 2014

Hamilton, Canada

– Took part in 1-month intensive program at McMaster University in Hamilton, covering entrepreneurship, innovation, and STEM topics in general

VOLUNTEERING

Co-founder and Program Coordinator, Hoist Halifax January 2015 – December 2017

Halifax, Canada

– Co-founded Hoist Halifax; program to get teens interested in tech and entrepreneurship through monthly workshops and guest speakers (https://voltaeffect.com/programs/hoist/)

AWARDS AND SCHOLARSHIPS

– NSERC CGS-M grant ($17.5K value)
– McGill Lorne Trottier Graduate Fellowship ($5K value)
– MITACS Globalink Grant for second co-op term at Dalhousie ($6K value)
– Dalhousie Schulich Scholarship ($41.9K value)
– Dalhousie Bruce and Dorothy Rossetti Scholarship Silver Award for a Second-Year student, for having the second-best GPA of my year ($1750 value)

LANGUAGES AND CERTIFICATIONS

– Native English and Greek (C2 level) and French B2 level

ACADEMIC PUBLICATIONS

– S. Matwin, A. Milios, P. Pralat, A. Soares, and F. Theberge, "Survey of Generative Methods for Social Media Analysis", arXiv preprint: https://arxiv.org/abs/2112.07041
– A. Milios, D. Zissis, K. Chatzikokolakis, and S. Matwin, "Sail ho! A deep learning approach for ship detection which utilises complimentary sensing capabilities, " 2018 Canadian Tracking and Fusion group (CTFG) Workshop, Ottawa, ON, Canada, 15-16 October 2018.
– A. Milios, K. Bereta, K. Chatzikokolakis, D. Zissis and S. Matwin, "Automatic Fusion of Satellite Imagery and AIS data for Vessel Detection," 2019 22th International Conference on Information Fusion (FUSION), Ottawa, ON, Canada, 2-5 July 2019. Link: https://ieeexplore.ieee.org/abstract/document/9011339
– K. Bereta, A. Milios, K. Chatzikokolakis, and D. Zissis, "Monitoring Marine Protected Areas using Data Fusion and AI Techniques," NATO CMRE Maritime Situational Awareness Workshop, La Spezia, Italy, 2019. Link: https://bit.ly/335Dws6