

Seyed Hossein (Soheil) Alavi

CONTACT INFORMATION	Department of Computer Science University of British Columbia	Email: sh.alavi77@gmail.com https://www.cs.ubc.ca/~salavis/
EDUCATION	Ph.D. in Computer Science, University of British Columbia	(2021-Present)
	M.Sc. in Computer Science, University of Southern California	(2020)
	B.Sc. in Computer Engineering, Sharif University of Technology	(2016)
	B.Sc in Aerospace Engineering, Sharif University of Technology	(2016)
TECHNICAL EXPERTIES	<ul style="list-style-type: none"> • Programming Languages: Python, Java, Scala, C++, MATLAB, PHP, SQL • Libraries: Pytorch, TensorFlow, Scikit, Soot, JavaFX • Mobile/Web: Android, Django, NodeJs, HTML, CSS, JS 	
EXPERIENCES	<p>NLP group, RA, UBC, Supervisors: <i>Raymond Ng</i> and <i>Vered Shwartz</i> (2021-Present)</p> <p>Apple Maps Search, Machine Learning / NLP Research Intern, Apple, Cupertino, USA (Summer 2020)</p> <p>Natural Language Dialogue Group, Research Assistant, ICT, USC, Advisor: <i>David Traum</i> (2018-2021)</p> <ul style="list-style-type: none"> • Open-domain chat bot, Develop open-domain end to end chat bots by fine-tuning dialoGPT on the Alexa topical chat dataset • Generative Neural Network, design and implement a generative deep learning model for the task of choosing the next best response for a given dialogue, exploiting from Transformers and BERT • Dual-Encoder, build a sequence to sequence neural network dialogue manager, based on the Dual-Encoder model's architecture, for the New Dimensions in Testimony (NDT) system • Virtual Human/Dialogue System, conduct a human in the loop experiment for Mr. Clue, a virtual agent that can play Word-Guessing Games • Android application, design a multilingual spoken dialogue system that elicits monologues from speakers of endangered languages to generate a general use corpus of audio responses <p>Intelligence and Knowledge Discovery group, RA, USC, Advisor: <i>Xiang Ren</i> (Spring-Summer 2018)</p> <ul style="list-style-type: none"> • Sequence to Sequence model for Knowledge Extraction, Implement a variation of TACRED position aware model from "<i>Position-aware Attention and Supervised Data Improve Slot Filling</i>" <p>Machine Intelligence and Data Science group, RA, ISI, USC, Advisor: <i>Greg Ver Steeg</i> (Fall 2017)</p> <p>Software Quality Lab, Research Assistant, USC, Advisor: <i>William G.J. Halfond</i> (2016-2017)</p> <ul style="list-style-type: none"> • "Annoying Advertisement" classifier, build an advertisement classifier using Support Vector Machine, K-Nearest Neighbours, and Random Forests algorithms • Design an energy consumption predictor of software functions using Linear Regression and programming analysis • Control flow Analysis and Data Flow Analysis of software programs using Soot library 	
HONORS AND AWARDS	<p>Annenberg Ph.D. Fellowship, University of Southern California (2016-Present)</p> <p>Gifted Student Award, Entrance exam waiver for graduate program, Sharif University of Technology (2016)</p> <p>Member of the Exceptional Talents Organization, Sharif University of Technology (2013-2016)</p> <p>Ranked top 0.01% in Mathematics and Physics participants, B.Sc. Entrance Exam (2011)</p>	
PROFESSIONAL ACTIVITIES	<p>Conference peer reviewer: AAAI (2020)</p> <p>Co-organizer of The 9th Dialog System Technology Challenge (DSTC9) (2020)</p> <p>Member of the New York Academy of Science (Fall 2019-Present)</p> <p>Conference peer reviewer: Southern California Natural Language Processing Symposium (SoCalNLP 2019)</p> <p>Conference peer reviewer: International Conference on Software Engineering (ICSE 2017)</p>	
SELECT PUBLICATIONS	<p>[1] "Which Model Should We Use for a Real-World Conversational Dialogue System? a Cross-Language Relevance Model or a Deep Neural Net?", Seyed Hossein Alavi, Anton Leuski, David Traum, <i>LREC</i> (2020).</p> <p>[2] "An Interactive Image Editing System using an Uncertainty-based Confirmation Strategy", Seitaro Shinagawa, Koichiro Yoshino, Seyed Hossein Alavi, Kallirroi Georgila, David Traum, Sakriani Sakti, Satoshi Nakamura. <i>IEEE Access</i> (2020).</p> <p>[3] "Can We Use a Spoken Dialogue System to Document Endangered Languages?", Seyed Hossein Alavi, Jacqueline Brixey, David Traum, <i>DiGo</i> (2019).</p>	