

Bashar Alhafni

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EDUCATION	University of Southern California , Los Angeles, CA <i>Master of Science</i> , Computer Science, May 2019	GPA: 3.66
	University of Bridgeport , Bridgeport, CT <i>Bachelor of Science</i> , Computer Science and Mathematics, May 2017	GPA: 3.97
RESEARCH EXPERIENCE	Center on Knowledge Graphs, Information Science Institute, University of Southern California <ul style="list-style-type: none">• EFFECT: Worked on exploring different techniques to collect and analyze data from unconventional sources including the Dark Web and various Social Media sites to integrate them within a machine inference framework to forecast cyber-attacks under the supervision of Professors Pedro Szekely and Craig Knoblock (Fall 2018)• SCHARP: Explored state-of-the-art data extraction techniques to process heterogeneous airforce operations data and developed an ontology to analyze and process the large volumes of data under the supervision of Professor Satish Kumar Thittamarahalli (Summer 2018)	
	Multimedia Information Group, University of Bridgeport <ul style="list-style-type: none">• Mapping Areas using Computer Vision Algorithms and Drones: Contributed to the development of an API to control a quadcopter and implemented a novel image processing algorithm to enable capturing successive images and merging them together to cover a certain area. This work was presented at the American Society for Engineering Education (ASEE) in 2016 (Summer 2015 - Spring 2016)	
	Aerospace Research Lab, University of Bridgeport <ul style="list-style-type: none">• NASA CanSat: Led a multidisciplinary team of students at the University of Bridgeport to simulate a real space mission as part of an international competition founded by NASA and built a full stack application to monitor the mission at all phases in real-time (Fall 2014 - Fall 2016)	
TEACHING EXPERIENCE	Course Producer , University of Southern California <ul style="list-style-type: none">• Information Retrieval and Web Search Engines	Spring 2019
	Grader , University of Southern California <ul style="list-style-type: none">• Information Retrieval and Web Search Engines	Fall 2018
	Teaching Assistant , University of Bridgeport <ul style="list-style-type: none">• Introduction to Computer Science I - Java• Introduction to Computer Science II - Java	Fall 2014 - Spring 2017
TECHNICAL SKILLS	Languages : Python, Java, C, SQL, C++, Scala, \LaTeX Web Development : HTML, CSS, JavaScript, Flask, Apache Tools & Frameworks : Git, PyTorch, SciPy, scikit-learn, Hadoop MapReduce	

COURSEWORK **University of Southern California**
• Analysis of Algorithms, Foundations of Artificial Intelligence, Information Retrieval and Web Search Engines, Foundations of Data Mining, Applied Natural Language Processing, Machine Learning, Database Systems

University of Bridgeport
• Design of Algorithms, Operating Systems, Computer Vision, Linear Algebra, Object Oriented Programming, Computer Architecture, Windows Programming, Discrete Mathematics

WORK EXPERIENCE **Associate Engineer** Pratt & Whitney
Nov 2017 - May 2018 East Hartford, CT
• Maintained and enhanced a python-based library to automate the migration of software issues from a SOAP issue tracking system to Jira as part of Pratt & Whitney's agile initiative

Technology Summer Analyst Morgan Stanley
May 2017 - Aug 2017 New York City, NY
• Worked with the Institutional Securities Technology (IST) team to design a widget using WPF in a trading application that is used by the Fixed Income Division to manage different components that are added dynamically
• Implemented test procedures to improve data handling for visualization enhancements

Technology Summer Analyst Morgan Stanley
May 2016 - Aug 2016 New York City, NY
• Worked with the Operations & Compliance Technology (OCT) team to design and execute a transpiler that is capable of creating Java Classes based on proprietary meta-data language which is used to describe Over the Counter (OTC) Derivative Products

Corporate Applications Intern United Technologies Corp
May 2015 - Aug 2015 Farmington, CT
• Organized a server refresh procedure to eliminate storing applications data on a Windows .Net server and to store them on UTC's Oracle databases to reduce security vulnerabilities

HONORS & AWARDS
Summa Cum Laude, University of Bridgeport Spring 2017
Dean's Award, University of Bridgeport Spring 2016
Academic Achievement Award, University of Bridgeport Spring 2016
President's List, University of Bridgeport Fall 2013 - Spring 2017
Trustee Scholarship, University of Bridgeport Fall 2013

RESEARCH INTERESTS Neural Machine Translation, Information Extraction, Morphological Analysis, Combinatorial Optimization.