



# Basel Shbita

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## EDUCATION

**UNIVERSITY OF SOUTHERN CALIFORNIA**  
**PHD. STUDENT, COMPUTER SCIENCE**  
2018 - Present | Los Angeles, CA, USA  
Research Interests: Knowledge Graphs,  
Semantic Web, Linked Open Data, Machine  
Learning, Information Extraction & Technology

### TEL AVIV UNIVERSITY

**BSC. ELECTRICAL ENGINEERING**  
2011 - 2015 | Tel Aviv, Israel  
Specialization Areas: Computer Science,  
Communications and Electronic Devices  
magna cum laude. GPA: 93.33

## INTERNSHIPS

### RESEARCH SCIENCE INSTITUTE

**RESEARCH INTERN (COMPUTER SCIENCE)**  
2009 | Cambridge, MA, USA  
Studied and practiced Statistical Natural  
Language Processing, Automatic Speech  
Recognition and Machine Learning.  
Research hosted by HP Autonomy & MIT

## AWARDS

### MOMACS INSTITUTE

**RECIPIENT OF THE FORD FOUNDATION**  
**MWS19 GRADUATE STUDENT TRAVEL GRANT**  
2019 | Pittsburgh, PA, USA

### TEL AVIV UNIVERSITY

**FACULTY DEAN'S LIST OF OUTSTANDING**  
**UNDERGRADUATE STUDENTS**  
2013 | Tel Aviv, Israel

**"FREESCALE SEMICONDUCTOR ISRAEL"**  
**EXCELLENCE SCHOLARSHIP**  
2013 | Tel Aviv, Israel

## SKILLS

### LANGUAGES

English • Arabic • Hebrew • Russian

### PROGRAMMING

Proficient:

Python • C++ • C • Unix Shell & Bash

Experienced:

C# • MATLAB • VHDL • Assembly

Familiar:

Ruby on Rails • HTML • CSS • JavaScript

## HOBBIES

Combined Martial Arts • Graphic Design  
• Soccer • Music Production

## EXPERIENCE

### INFORMATION SCIENCES INSTITUTE

2018 - PRESENT

**RESEARCH ASSISTANT, CENTER ON KNOWLEDGE GRAPHS**  
Aug 2018 - Present | Marina del Rey, CA, USA

- Working on knowledge graphs and the semantic web with an emphasis on data normalization as a means to solve complex information integration problems
- Investigating methods to leverage machine learning techniques and knowledge graphs to establish automatic data extraction tools for scientific modeling

### APPLE

2018

**EMBEDDED FIRMWARE ENGINEER, FLASH STORAGE SOFTWARE DEPARTMENT**  
Jan 2018 - June 2018 | Herzliya, Israel

- Designed and developed complex SW modules for ultra high performance, real-time embedded systems in a multiprocessor environment for Apple products
- Defined firmware features and led vertical integration with other modules in storage stack (i.e. drivers, file-system)

### MELLANOX TECHNOLOGIES

2011 - 2017

**SENIOR FIRMWARE ENGINEER & TEAM LEADER, SWITCH SILICON CORE DEPARTMENT**  
Apr 2017 - June 2017 | Tel Aviv, Israel

- Managed team of 5 engineers
- Led the 100GbE Switch Systems firmware development process and verification activities - an agile operation involving 16 engineers
- Developed a distributed functional testing environment, debug tools and performance testing in C++ in Unix for both Ethernet and InfiniBand fabrics in Data-Link and Network layers of the OSI (static and dynamic analysis)
- Delivered technical presentations to 50+ developers from various teams
- Awarded for excellence and ranked "Superior" (top 5% out of 3000)

**TEAM LEADER FIRMWARE ENGINEER, SWITCH SILICON CORE DEPARTMENT**

May 2015 - Mar 2017 | Tel Aviv, Israel

- Managed team of 3 engineers
- Contributed to end-to-end development for the company's 100GbE Switch products and led a full silicon bring-up process: Pre and Post-Silicon
- Conducted personal training, code reviews; defined coding-style and methodologies of software engineering for team of 30
- Optimized shared library cross-platform code, resulting in 40% reduction in project compilation time for 90+ department developers
- Supervised remote testing processes operating in China & USA
- Represented company in the 2016 VSF Interoperability Event (TX, USA)

**FIRMWARE ENGINEER, SWITCH SILICON CORE DEPARTMENT**

Mar 2014 - Apr 2015 | Tel Aviv, Israel

- Introduced simulation tool saving up to 50% time in firmware development cycle
- Developed "Stress" tool that has become major tool for system production/screening, power measurements and debug process
- Created training-program for new employees and conducted daily technical and architectural guidance and coding assistance
- Represented company in the 26th IBTA Plugfest (NH, USA) & HVC15 (Haifa)

**FIRMWARE STUDENT, SWITCH SILICON CORE DEPARTMENT**

Oct 2011 - Feb 2014 | Tel Aviv, Israel

- Developed ANSI-C compiler-specific code to run on Switch Systems RISC
- Managed and optimized Python-based regression system
- Implemented cross-platform error-injection and functional-validity tool used by both departments of Switch Systems and Channel Adapters