

BARAK STERNBERG

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EDUCATION

BSc: Math & Computer Science | Tel-Aviv University

2010 JUL – 2012 AUG

- Graduate of “Arazim” Excellence Program (Intelligence Corps Program).
- Cyber-Workshop: “REDB: Plugin for IDA Pro” under Prof. Eran Tromer supervision.
- Dean’s List at years: 2010-2011, 2011-2012
- Grades: 92 at Math (magna cum laude), 96 at CS (summa cum laude).

MSc: R&D in Computer Science | Tel-Aviv University

2014 OCT – 2018 DEC

- Thesis in algorithms for Computational-Biology under the supervision of Prof. Roded Sharan. published paper at WABI / ESA 2018.
- Thesis Grade: 95, Total Grade: 94.

Officers School | IDF

2012 OCT – 2013 MAY

- Learned about management, military and intelligence-related subjects. Officers Training School & Intelligence Corps course - 3 Months each.

Course “Acham”: R&D Course | 8200 Unit at IDF

2013 MAY – 2013 OCT

- Experienced & learned various math & CS research, focused on solving hard technological & mathematical problems in the areas of interest.



EXPERIENCE

Technological Researcher | 8200 Unit at IDF

2013 OCT – 2017 JULY

- Solving hard problems, long-term (months+)
- Developing and delivering end-to-end solutions to clients.
- Self-learn of new subjects and researching these areas.
- Award “Chibur-Yadayim” for exceptional project success.

“Arazim” Program Instructor | 8200 Unit at IDF

2015 JUL – 2016 JUL

- Directing and supporting programs’ students at university (10-15 people).
- Supporting for logistics, workshops and lectures and help for young students.

Research Student | Tel-Aviv University

2017 AUG – 2018 JAN

- Working on thesis at computer science department under Prof. Roded Sharan supervision.
- Researching for solutions for hard-problems in Computational Biology. Working with various medical data-sets on a day-to-day basis.
- Experience in algorithms: constraint-solving, dynamic algorithms, machine-learning and deep-learning algorithms. Highly experienced with “Personalized PageRank” algorithms.
- Publishing and presenting a paper at WABI /ESA 18’ at Finland – “A Dynamic algorithm for network propagation” - <http://drops.dagstuhl.de/opus/volltexte/2018/9309/>

Research Team Leader | 8200 Unit at IDF

2018 FEB – 2019 AUG

- R&D Team leader (5-10 people).
- Leading a team of experienced researchers, directing projects and initiating new ground-breaking initiatives in relevant areas.
- Delivering technological solutions and capabilities to clients.

Backend developer & Security consultant | HelpApp

2015 SEP – 2016 JUN

Python Developer and Assistant with SSL deployment issues as well as basic security assessments.



SKILLS

- Reverse-Engineering of applications and operating systems (Android, Linux, iOS, Windows and Mac).
- Vulnerability-Research of various security systems on various OS.
- Python & Low-Level Development (C,C++).
- High-Level programming (C#, Java).
- English (High Level), Hebrew (Native).
- Algorithms development: Dynamic Algorithms and ML, DL (Thesis).
- Linux & Kernel Debugging.
- Research Management (5-10 people, with 3-4 research projects).
- Curiosity & self-learning of various technology & math subjects on a day-to-day basis.



ACTIVITIES

2010-2013:

- Physics Tournament (“Kasafot”) at Weizmann institution (3rd place).
- CodeGuru CS Competition – 5th Place.

2014-2019:

- DJ Course @ BPM College.
- Reverse Engineering of “Secret” Android app, Decrypting custom encryption utilized for API obfuscation and generating various commands for triggering API state changes - <http://livingbeef.blogspot.com/2014/12/reversing-apks-for-fun-and-profit.html>
- Hardware Development: Designing a small trackable device that can be easily trackable using Android app over BLE (used the TI-CC2650) - <https://barakolo.wixsite.com/findme>
- Used RaspberryPi for various projects:
 - Controlling AC - (using IR Receiver) decoding and generating AC commands.
 - Controlling smart-home system and lights (using RS854 – Ethernet connector).
- CTF & pwnable.kr player – hackthissite.org, pwnable.kr, CCC, Google CTF
- Volunteering in Tanzania (Renovation of Sanya-Juu School, Tech-guidance for locals).