

ETH Zurich
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Research interests

Geometry processing, discrete differential geometry, digital fabrication and architectural geometry.

Education

- | | |
|----------------|---|
| 2016 – present | ETH Zurich, Switzerland
PhD in Computer Science
Supervised by Prof. Olga Sorkine-Hornung. |
| 2014 – 2016 | ETH Zurich, Switzerland
MSc in Computer Science
Thesis title: Scalable Locally Injective Mappings. Supervised by Prof. Olga Sorkine-Hornung. |
| 2012 – 2014 | The Open University of Israel, Israel
BSc in Mathematics |

Publications

- [1] The shape space of discrete orthogonal geodesic nets. Michael Rabinovich, Tim Hoffmann and Olga Sorkine-Hornung. ACM Transactions on Graphics, Vol. 37(8), 2018 (*ACM SIGGRAPH ASIA 2018 issue*).
- [2] Discrete geodesic nets for modeling developable surfaces. Michael Rabinovich, Tim Hoffmann and Olga Sorkine-Hornung. ACM Transactions on Graphics, Vol. 37(2), 2018.
- [3] Scalable locally injective mappings. Michael Rabinovich, Roi Poranne, Daniele Panozzo and Olga Sorkine-Hornung. ACM Transactions on Graphics, Vol. 36(2), 2017.

Honors and Awards

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| 2014 | ETH master excellence scholarship, ETH Zurich. |
| 2014 | Deans list of excellence, The Open University of Israel. |
| 2014 | "Young Weizmann Scholars" scholarship, given by The Weizmann Institute of Science to outstanding Israelis undergraduate students. The only mathematics student chosen that year (2014). |
| 2011 | Unit Excellence Award given for innovative technology (Israel Defense Forces, 8200 unit). |

Selected talks

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| 09.2019 | International Geometry Workshop, Strobl, Austria. |
| 08.2019 | SIGGRAPH Doctoral Consortium, Los Angeles, United States. Selected participant as 1 of the 8 best soon-to-be graduating PhD students in computer graphics. |
| 07.2019 | SIAM Conference on Applied Algebraic Geometry, Bern, Switzerland. Invited speaker for a minisymposium on "Geometric design for fabrication". |
| 07.2019 | Symposium on Geometry Processing, Milan, Italy. Giving a graduate school course on Nets in Discrete Differential Geometry. |

12.2018	ACM SIGGRAPH ASIA, Tokyo, Japan.
08.2018	ACM SIGGRAPH, Vancouver, Canada.
09.2017	International Geometry Workshop, Obergurgl, Austria.
08.2018	ACM SIGGRAPH, Los Angeles, United States.

Reviewer

Journals: ACM Transactions on Graphics, Computer Graphics Forum, Computer Aided Geometric Design

Conferences: ACM SIGGRAPH, ACM SIGGRAPH ASIA, EUROGRAPHICS,

Other work experience

2012 – 2014	Security Researcher, NSO Technologies Discovering and exploiting security holes in mobile devices on various OS and architectures.
2011 – 2012	Project Manager and Technical Leader, Israeli Defense Forces, 8200 Unit Technical leader in the fields of designing and implementing windows kernel drivers and debugging low-level components. Creating and delivering advanced workshops on Windows Internals and Windows Kernel Development
2010 – 2011	R&D Leader, Israeli Defense Forces, 8200 Unit Managing a team of three experienced developers. Designing and developing large-scale systems.
2008-2010	Software engineer, Israeli Defense Forces, 8200 Unit Specializing in developing low-level components in C and C++ and implementing various network protocols.

Technical experience

- Vulnerabilities research and reverse engineering (x86, ARM).
- Specialist in OS internals and debugging drivers and low-level components (windows/linux/iOS).
- Extensive knowledge in computer networks and various network protocols.
- C,C++ and Python - Over 5 years of development experience.
- Matlab for visual computing.

Languages

Hebrew (native), English (fluent), German (conversational).

Hobbies

Snowboarding, climbing, film enthusiast.