Dmitry Messerman

**Senior VLSI CAD Engineer**

[**dmitry.messerman@gmail.com**](mailto:dmitry.messerman@gmail.com) **| +972-54-6326268 |** [**Linkedin**](https://www.linkedin.com/in/dmitrymesserman)

# Professional Summary

EDA CAD tool expert with over 20 years of experience in the development, support, and deployment of backend CAD and Silicon Debug tools for high-speed and analog custom design.

Renowned for multi-disciplinary expertise, problem solving and algorithm development.

2-3 more lines

# Tech Skills

Programming Languages: Python, C/C++, Perl, Tcl, Skill, MATLAB

Cadence, Synopsys and Siemens EDA tools for VLSI analog and custom design and verification

# Work Experience

**2006 – Present: Principal Engineer, Intel Corporation**

* Led the development, deployment customization and support of in-house and commercial EDA backend tools
* Developed modeling algorithms in multiple areas: Fast resistance extraction from VLSI layout - computational geometry algorithm, patent granted
* Surrogate modeling of silicon heat dissipation in tester environment based on diffusion equations solver
* Mentorship
* Fast Signal to Noise Ratio (SNR) estimation algorithm for PCB and silicon package interconnect
* Led development of post-silicon debug tools:

- Platform HW/SW co-simulation for BIOS MRC training validation

- Structure-Based Functional Tests (SBFT) coverage improvement based on genetic algorithm

* Development, customization and support of in-house block and full chip level VLSI layout editors
* Recognized for exceptional debugging and problem-solving capabilities in CAD software and Linux

**1998 - 2018: CAD Engineering Team Lead, Intel Corporation**

* Responsibilities…
* Responsibilities
* Responsibilities
* Responsibilities
* responsibilities

**1995 – 1998: Software Developer, Intel Corporation**

* Responsibilities…
* Responsibilities

**1992 – 1995: Application Engineer, Intel Corporation**

**1990 – 1992: Physicist and Software Engineer, FrantzTech Ltd**

# Education

**Ph.D. in Electrical Engineering**, St. Petersburg Polytechnic University, Russian Federation.

*Developed 2-D Maxwell full-wave solver for high voltage transmission line above two-layer ground*

**M.Sc. in Electrophysics**, St. Petersburg Polytechnic University, Russian Federation.

# Publications and patents

1. Yan J., Aydiner A., **Messerman D**., Zhu J., Camacho Mora A., Liao J., Ma M., Jiao D. Efficient Equalization Optimization Algorithm for Signaling Analysis. Nonlinear System 2019 IEEE MTT-S International Conference on Numerical Electromagnetic and Multiphysics Modeling and Optimization (NEMO).
2. Reisfeld G., **Messerman D.**, Bone N., Lazar A. VARAN: variability analysis for memory cell robustness. Proc. SPIE 6925, 69250L, 2008.
3. **Messerman D.**, Seltser M. Reorganizing rectangular layout structures for improved extraction. - United States Patent 7389001 B2, 2008.
4. Chakravarty S., Ben-Noon Y., Chiprout E., Mazumder M., **Messerman D.** Inductance Modeling. - United States Patent 7325208 B2, 2008.

# Languages

**English** – full professional proficiency, **Hebrew** - fluent, **Russian** – native.