

# CURRICULUM VITAE NIV SARIG

Email: niv.sarig@gmail.com, Phone: 972-9-7671595, Cell: 972-50-2050232.

#### PERSONAL DETAILS

Date of birth:  $20\frac{th}{}$  of February, 1977. Gender: Male.

Citizenship: Israeli\German. Place of birth: Hibat Zion, Israel. Languages' skills: Hebrew-mother tongue, Place of residence: Kfar Saba, Israel

English-excellent.

#### EMPLOYMENT EXPERIENCE

12/11-present Mathematician - Path finding team, CTO group, Nova

measuring instruments, Rehovot, Israel:

Calculations speedup, Interpolation in libraries including using Neural networks architectures, A-priori error estimation, Multi-dimensional numerical integration, Optical\physical modeling and simulations, Scientific\industrial paper pub-

lication, General Mathematical expert support.

12/11-present Lecturer - Weizmann institute of science, Rehovot, Is-

rael:

Advanced Mathematical courses for Graduate students. Partial differential equations, Complex Analysis, Sturm Li-

ouville Thoery, Basic Algebra and more.

11/96-4/00 Lieutenant - Army service: Platoon commander, Ed-

ucation corps, IDF.

#### **EDUCATION**

Academic skills Theoretic mathematical research, Numerical simulations

programming, **Best teaching skills** and much experience, Closed form analytic calculations, **signal**, **picture and data processing** using analytic, numeric and algebraic tools.

10/04 - 12/11

Graduate studies in Mathematics: Weizmann institute of science, Department of Mathematics, Rehovot, Is-

rael.

Ph.D Thesis: Algebraic reconstruction of "shift generated" signals from integral measurements.; Advisor: Prof. Y. Yomdin. M.SC. Thesis: Robust Reconstruction of Nonlinear Models Parameters From Measurement Data; (final grade 98)

09/01 - 09/04

Undergraduate Studies in Mathematics and Physics at the **Hebrew University in Jerusalem**, **Israel**. (final grade 92)

## Programming skills

Matlab/Octave Experienced

C++/Python, Basic/eager to develop expertise.

Windows OS and Office softwares Experienced LATEX editors - Winedt, BaKoMa Experienced.

### References

These persons are familiar with my professional qualifications and my character:

Dr. Gilad Barak Team manager, Nova measuring instruments

Phone: +972-73-2295678 Email:gilad-b@novameasuring.com **Dr. Shay Wolfling** CTO, Nova measuring instruments

Phone: +972-73-2295816 Email:shay-w@novameasuring.com

Prof. Yosef Yomdin Thesis advisor

Phone: +972-8-9342921 Email:yosef.yomdin@weizmann.ac.il

## LIST OF PUBLICATIONS

- Archie C.; Sarig N.; Sendelbach M. et.al. Effect of measurement error budgets and hybrid metrology on qualification metrology sampling, Proceedings of SPIE Vol. 9050, 90501M (2014).
- 2. Batenkov D.; Sarig N.; Yosef Yomdin. Decoupling of Fourier Reconstruction System for Shifts of Several Signals, Proc. of Sampling Theory and Applications (SAMPTA), 2013.
- 3. Batenkov D.; Sarig N.; Yosef Yomdin. Algebraic reconstruction of piecewise-smooth functions from integral measurements, Functional Differential Equations, 19(1-2), 2012, pp.13-30.
- 4. Ettinger B.; Sarig N.; Yomdin Y. Linear versus non-linear acquisition of step-functions, J. Geom. Anal. 18 (2008), no. 2, 369–399. 41Axx. arXiv:math/0701791v2 [math.CA].
- Sarig N.; Yomdin Y. Signal acquisition from measurements via non-linear models, C. R. Math. Acad. Sci. Soc. R. Can. 29 (2007), no. 4, 97–114. arXiv:0810.5206v1 [math.CA].