



GEIR K. NILSEN

Apeltunlien 54, 5238 RÅDAL, NORWAY
+47 918 51 552 – geir.kjetil.nilsen@gmail.com
36 years old

Page 1/2 [v1.015]

PROFESSIONAL PROFILE

Software/research engineer with a scientific mind and passion for technology. Ten years experience with sensor monitoring systems in terms of algorithm/signal processing/software R&D, testing, field work & project/team leadership.

EXPERIENCE

- | | |
|-------------------------------|---|
| 2016-2018
(2yrs 2 mos) | Software Manager @ TE Connectivity Sensor Solutions / Wema System AS <ul style="list-style-type: none">• Team leader of five software engineers.• Project manager for the definition and implementation of a new software development process based on the Automotive SPICE standard.• Planning and management of the embedded software development for ultrasound based fluid-property sensors. |
| 2015-2016
(2 yrs) | Software Engineer @ General Electric Company (GE Oil & Gas) / Naxys AS <ul style="list-style-type: none">• Co-Inventor of (patent-pending) acoustic monitoring system for subsea drilling Blow-Out Preventers (BOPs):<ul style="list-style-type: none">o Project planning/management of prototype build, programming, experiments & testing.o Development of analysis/processing methods [3].o Two months abroad in Houston for data collection & BOP integration aspects (+ offshore pilot testing outside of Egypt). |
| 2007-2015
(7 yrs) | Project/Software Engineer @ Naxys AS <ul style="list-style-type: none">• Signal processing, software & algorithm development, array processing, embedded implementations, simulations, user interfaces and databases.• Key contributor to Naxys' knowledge base on signal/array processing & software stack.• Development work with sensors (acoustic/vibration) & data acquisition systems.• Testing and field service, offshore commissionings. |
| 2006
(2 mos
internship) | Research Assistant @ Institute of Marine Research <ul style="list-style-type: none">• Data analysis of electronic data storage tags from fish in the ecosystem. Work resulted in a publication [2]. |
| 2004-2007
(5 semesters) | Teaching Assistant @ Department of Informatics, University of Bergen <ul style="list-style-type: none">• Computers and Operating Systems, Programming Paradigms, Computer Programming for Science. |

EDUCATION

- | | |
|-----------|--|
| 2002-2007 | BSc & MSc in Computer Science (Informatics) @ University of Bergen, Norway <ul style="list-style-type: none">• MSc thesis resulted in a publication in <i>IEEE Transactions on Signal Processing</i> [1]. |
| 1999-2002 | University Admissions Certification @ Valdres Upper Secondary School & Danielsen Intensivgymnas. <ul style="list-style-type: none">• General + Vocational (Electronics: GK + VK1). |



GEIR K. NILSEN

Apeltunlien 54, 5238 RÅDAL, NORWAY
+47 918 51 552 – geir.kjetil.nilsen@gmail.com
36 years old

Page 2/2 [v1.015]

TECHNICAL SKILLS, MERITS & COMPETENCES

Languages

Norwegian: Mother tongue
English: Fluent

Programming Skills

Matlab, C#, C, Python; Experienced Linux user.

Merits

Two patents [4, 5], three publications [1,2,3].

Courses/Certifications

Basic Offshore Safety Induction and Emergency Training incl. Helicopter Underwater Escape training (valid through Nov'19), ISO Vibration Analyst course, Six Sigma Green Belt (started), Stanford's Machine Learning course, TE Sensor Solutions Leadership Experience course, Polarion Requirements Management course, Driver's license class A & B.

Personal Projects

A C# Phase Vocoder Implementation (Contact for access),

<https://bitbucket.org/geirnilsen/alphanumeric/src/master/PhaseVocoder/>

A Parametric Equalizer for Audio Applications (Theory & Code),

<https://octovoid.com/2017/11/04/coding-a-parametric-equalizer-for-audio-applications/>

REFERENCES: PUBLICATIONS & PATENTS

- [1] G. K. Nilsen, [Recursive Time-Frequency Reassignment](#), 2009, [IEEE Transactions on Signal Processing](#)
- [2] Sam Subbey, Kathrine Michalsen, G. K. Nilsen, [A tool for analyzing information from data storage tags: the continuous wavelet transform \(CWT\)](#), 2008, [Reviews in Fish Biology and Fisheries, Springer Science](#).
- [3] Markus Svensén, David S. Hardwick, Honor E. G., Yngve Villanger, G. K. Nilsen, Conference Paper: [Acoustic Monitoring of Subsea Blowout Preventers using Mixtures of Hidden Markov Models](#).
- [4] Svein Arild Haugen, G. K. Nilsen, 2016, Patent application: [Subsea Multifunctional Sensor](#)
- [5] Svein Arild Haugen, Jens Abrahamsen, G. K. Nilsen, 2014, Patent application: [Subsea Equipment Monitoring System](#)

LEISURE INTERESTS

Hiking, Cooking, Writing (see [blog](#)), Family (partner + two children)