

# Gaël CLOSE, PhD

Engineering Manager | Sensor Development | 15-year experience



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## EXPERIENCE

### MELEXIS GLOBAL INNOVATION MANAGER

2021 - Current | Bevaix Switzerland

- Established the corporate innovation team and lab from scratch.
- Define and drive the **technology roadmap** aligned with business objectives.
- Hire and lead a **team of a dozen R&D engineers** with annual budget of €2.5M.
- Develop sensor technologies for **Robotics and Digital Health** applications.
- Liaise strategically with executives, suppliers and potential customers.

### MELEXIS DESIGN ENGINEER → STAFF SYSTEM ARCHITECT

2011 - 2020 | Bevaix Switzerland

- Started as circuit designer in charge of component design and verification.
- Promoted several times as responsibilities grew to encompass the architecture of the complete **magnetic position sensor product line**.

### IBM RESEARCH POST DOC → RESEARCH STAFF MEMBER

2008 - 2011 | Zurich Switzerland

- Designed novel memory chips and built a FPGA-based setup.

## R&D ACHIEVEMENTS

- Chief architect of **Triaxis sensors gen. III**. These magnetic sensors are deployed in automotive applications (steering, braking), generating more than €10M per year.
- Lead inventor of the **Tactaxis**, a magnetic force sensor for robotics.
- Lead developer of the online **Magnetic Simulator by Melexis**.
- Lead developer of the first chip with **carbon nanotube wires**.
- **6 patents granted**, 20 pending, **30 peer-reviewed publications**.
- €1.3M collected of government funds for research in Belgium (from VLAIO) and Switzerland (from Innosuisse).
- 4 EPFL master thesis co-supervised in magnetic sensors, robotics and medtech.
- Multiple courses taught in sensor design and system engineering.

## AWARDS

- 2018 IEEE Senior Member
- 2017 ASCC Six Sigma Black Belt
- 2010 Rated among the top employees in 2010 by IBM for outstanding contributions
- 2008 IBM certificate of appreciation for technical accomplishment
- 2006 Intel Foundation PhD fellowship
- 2003 Belgian American Educational Foundation fellowship
- 2003 Association of Engineers from the University of Liège best thesis award

## SKILLS

### MICROELECTRONICS

Transducer • CMOS • Magnetics  
• MEMS • Embedded software • Analog/digital hardware • Modeling • Signal processing • Data analysis

### SYSTEM ENGINEERING

Feasibility • Requirements • Risk  
• Analysis • Specifications • Verification

### MANAGEMENT

Product lifecycle • Innovation • R&D projects • Coaching

### LANGUAGE

French and English

## EDUCATION

### STANFORD UNIVERSITY

PHD IN ELECTRICAL ENGINEERING

2003 - 2008 | Stanford, California

Thesis in Nanoelectronics

### UNIVERSITY OF LIÈGE

MASTER IN ELECTRICAL

ENGINEERING

1998 - 2003 | Liège, Belgium

Greatest Distinction

### POST GRAD. TRAINING

Coaching • Leadership • Technology Roadmap & Entrepreneurship • Design Thinking

## REFERENCES

### **Evangelos Eleftheriou**

CTO, Axelera AI

formerly of IBM Research

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### **H.-S. Philip Wong**

Professor, Stanford University

Also Vice-President, TSMC

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