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Profile

As a physicist and entrepreneur deeply engaged in the intersection of science and technology, I am driven by a passion for solving complex problems through interdisciplinary collaboration. My journey has led me to found companies, develop cutting-edge products, and build teams around specialized products. I thrive on challenges that demand technical and business insights. My goal is to use my mixed background in science and entrepreneurship to contribute to projects in complex and challenging environments.

Experience

2023–Present   **Startup Advisor**, , Remote
I offer advise to young, deep-tech startups. With the experience gained during my entrepreneurial activities, I decided to pay it forward by helping young scientists getting started. I offer them coaching, product-related advise, business model review, and support with business development. **Core skills**: Strategy, Coaching, Business Development.

2019–2023   **Founder**, DISPERTECH, The Netherlands
I spun out the company from Leiden University and the Max Planck Institute. We transferred the technology to characterize small objects, such as lipid nano-particles, liposomes, and exosomes,. Some meaningful achievements:

- Product Development: Designed (hardware and software) the nanoCET. Release it to market in under 9 months.
- Business development: Established key partnerships, participated in consortia and proposal writing. Created a consistent marketing presence at conferences and online.
- Leadership: Grew the team to 10 full-time employees. Lead the company through a product pivot. Created the nanoQNT in just under 6 months.
- Entrepreneurship: Seed investment round (1.2M€) lead by Value Creation Capital to strengthen the company and push for market-informed growth.

Core skills: Project management, team leadership, product and business development

2017–Present   **Consultant, Instructor**, PYTHON FOR THE LAB, France/Remote
I organize workshops to help young scientists become more proficient at developing instrumentation software. I also coach and mentor leaders who need to improve their internal software development practices. I offer strategic advice, including business model review, hiring decisions, and code review.
Core skills: Strategy, Software development, Public speaking, workshop organization

2018–2018   **Postdoc**, *Nano photonics group*, UTRECHT UNIV., The Netherlands
I focused part of my time on valorizing the research results from the group. I focused on creating a solid business plan that attracted public and private funding and lead to the creation of Dispertech. The other part of the time I focused it on developing a framework for real-time nanoparticle tracking analysis, which was released with the name PyNTA.
Core skills: Business strategy, proposal writing, real-time data analysis

2017–2018   **Software Developer**, UETKE, The Netherlands/Remote
I focused on building open-source software for controlling scientific instruments and managing data. I also consulted on topics relative to information technology infrastructure in research labs.
Core skills: Python, PyQt, software design, contract negotiation

2011–2012   **Research Assistant**, TENARIS, Argentina
I worked in the department of Reheat Furnaces at the R&D division. I employed finite element analysis (FEM) methods to optimize industrial processes. I was in charge of algorithm optimization using Python, data acquisition, and overall support of the team working in the factory.
Core skills: Time management, experiment design, finite element (COMSOL, Fortran)

Education

2012–2017   **PhD in Physics**, *Prof. Michel Orrit Lab*, LEIDEN UNIV., The Netherlands
I focused on understanding the luminescence of gold-nanoparticles. I built a confocal microscope combined with optical tweezers and photothermal imaging. I developed the software for data acquisition and, based on it, I created new techniques to image nanoparticles and measure their temperature with far-field optics.
Core skills: Communication, project management, time management, optical microscopy, nanotechnology, optical spectroscopy, technical writing

2004–2010   **Physics**, *University of Buenos Aires*, Argentina, Final grade: 9.08/10
Combined bachelor and master studies.
○ Undergraduate research lab: Single-molecule anisotropy studies in polymer thin films.

Grants and Funding

2023   Public-Private Partnership (NWO) awarded a 75k€ to develop the prototype of a light-sheet microscope

2020   Take-Off Phase 2 (NWO), convertible loan, assigned to Dispertech BV. Total budget: 150k€.

2019   Seed investment from Nascent Ventures B.V. to develop and commercialize the nanoCET platform through Dispertech BV

2018   Take-Off Phase 1 (NWO) to perform commercial viability studies. Budget: 40k€.

2012   Ph.D. funded by FOM in Leiden, The Netherlands. The total budget for the project, besides salary: 150k€.

Selection of Publications

2020   "Python for the Lab", ISBN: 979-1716517685

2019   "PyNTA: An Open Source Software Application for Live Particle Tracking", S Faez, A Carattino, A Mosk. Preprints

2018   "Gold nanoparticles as absolute nanothermometers", A.Carattino, M. Caldarola, M. Orrit. Nano letters 18 (2), 874-880

Extra Activities

2022   Joined the Unlock_ incubation platform to explore the market potential of light-sheet microscopy for biomarker detection

2019–2022   Lead developer of the platform KlimaatHelpdesk.org

2018   Joined the Utrecht INC science venture program

2015–2017   Coordinator of the network of Argentine scientists in The Netherlands

2015   Editor of *Thesis*, Leiden Ph.D. association magazine

2014   Vice Chair, Treasurer, and Webmaster of Leiden Ph.D. association

Communication Skills

2019–2023   Several presentations at conferences, pitching competitions, customer interactions

2017–Present   Several Python for the Lab Workshops organized

Languages

Language	Level	
French	Studying	*Basic words and phrases only, B1 level.*
Spanish	Mother tongue	
English	Advanced	*Professionally fluent*
Portuguese	Advanced	*Professionally fluent*
Italian	Advanced	*Professionally fluent*
Dutch	Basic	*Basic words and phrases only, A2 level.*

Interests and Hobbies

- Tango Dancing   - Sailing