

Cozmin Ududec

CONTACT INFORMATION

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SUMMARY

Research leadership experience

- Co-founded a research driven startup with a vision to optimise complex decision making and reduce economic and environmental inefficiencies.
- Proven skill at growing and leading high-performing research and engineering organisations over 7+ years.
- Excellent communication and coordination skills, and ability to build strong and lasting relationships across a diverse and fast growing organisation.
- Strong ability to develop and implement multiple research and engineering programmes and strategy from scratch through to Series B fundraising due diligence.
- Skillful at moving between and integrating multiple levels of analysis under uncertainty: from technical details of projects, to programme management, risk management, strategy and recruitment.
- Extensive experience in identifying, diagnosing and implementing organisational design, workflow and process changes, while bringing those impacted along for the journey.

Technical Skills

- 10 years of applied research experience in modelling high-dimensional electricity grid time series, machine learning, statistics, data science, and constrained optimisation.
- Expertise in electricity grids and electricity markets structures, regulation, operations, and optimal power flow.
- Software engineering: extensive Matlab experience, intermediate Julia, and basic Python.
- Ph.D. in Quantum Physics and Quantum Information.
- Prince2 Project Management Certification.

PROFESSIONAL EXPERIENCE

Chief Scientist and Research Team Lead – [Invenia Labs](#) – Cambridge, UK
Oct 2015 –

- Co-founded Invenia Labs in 2015, the research wing of Invenia Technical Computing, and enabled the expansion of the research organisation from 2 to 25+ staff.
- Directly and indirectly managed the full research organisation, including data scientists, machine learning researchers, power systems engineers and research software engineers.
- Key role in raising Series A and B fundraising rounds from Silicon Valley venture capital, including leading research due diligence processes.
- Led many organisational improvements, including: development of a research strategy, processes to prioritise and plan projects, and creation of a new operating model incorporating product, project and team leads.
- Key role in operations and programme management, and coordination of research with software engineering teams between UK and Canada.
- Supported research team members in understanding and reaching their professional development goals, and mentoring senior researchers to grow into new technical and people leadership roles.

- Maintained hands-on involvement in research projects and part time proof-of-concept projects.

Co-founder and Researcher – [Invenia Technical Computing](#) – Winnipeg, Canada
2006 – Oct 2015

- Developed, tested and put into production time series forecasting models, optimisation and decision making algorithms.
- Led the introduction of quantitative risk assessment into research workflows.
- Co-led development of many new project proposals and research directions.
- Maintained advisory role during Ph.D. (2006 – 2012).

EDUCATION

Ph.D., Physics and Astronomy, 2006 – 2012

- University of Waterloo and the [Perimeter Institute for Theoretical Physics](#), Canada
- Thesis: *Perspectives on the Formalism of Quantum Theory*

B.S., Mathematics and Physics – Joint Honours (Allen Medal), 2001 – 2006

- University of Manitoba; Winnipeg, Canada

REFEREED

[Google Scholar Profile](#)

PUBLICATIONS

I have publications in a range of research areas, including: applying machine learning to power grid optimisation, data analysis of electricity market data, postulates characterising quantum theory, and equilibration in complex quantum systems.

PERSONAL INTERESTS

I have broad reading interests in areas like machine learning, quantum information, philosophy of physics, economics, and history of technology and innovation. More practically, I've taken introductory flight lessons and like to experiment with cooking new breakfast and brunch dishes. I stay active by playing squash and tennis.