

JOHN MICHNIEWICZ

johnmichniewicz.com

+44 7426 970 094
john@johnmichniewicz.com

github.com/johnmichniewicz
linkedin.com/in/johnmichniewicz

HIGHLIGHTS

- Built a semiconductor quantum device experimental capability at Imperial College from the ground up.
- Placed third in the Royal Academy of Engineering Fellowship competition.
- Co-founded a quantum device automation startup and secured an £800k investment offer.
- Published 7 peer-reviewed papers (400+ citations), including work in Nature Electronics.

EXPERIENCE

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|-------------|---|---|
| 2023 – 2026 | Postdoctoral Research Associate | Imperial College London |
| | <ul style="list-style-type: none">◦ Independently secured industrial partnerships, facilities and commercial device access required to launch a new semiconductor quantum device program.◦ Led development of extensible Python based measurement control software and automated data acquisition pipelines supporting large scale device characterization.◦ Designed, assembled and commissioned cryogenic measurement infrastructure, integrating instrumentation, device packaging and custom experimental workflows.◦ Conducted one of the largest charge-noise studies of silicon quantum dots, generating datasets to address a key bottleneck to scalable quantum computing and automation. | |
| 2022 – 2023 | Entrepreneurial & Professional Activities | Cambridge, UK |
| | <ul style="list-style-type: none">◦ Co-founded a quantum device venture to automate the tuning of semiconductor quantum devices, addressing a traditionally lengthy and manual process.◦ Sponsored to participate in EnterpriseTECH STAR to commercialize application-specific computing architectures aimed at reducing memory and CPU overhead.◦ Taught and supervised mathematics and physics students across five Cambridge colleges and conducted undergraduate admissions interviews. | |
| 2018 – 2022 | PhD & MPhil Researcher | University of Cambridge / Hitachi Cambridge Laboratory |
| | <ul style="list-style-type: none">◦ Investigated isolated electron spins and quantum dots in commercial semiconductor devices, developing custom hardware, instrument control software and data analysis workflows.◦ Worked within a hybrid academic industrial environment, collaborating with universities, semiconductor manufacturers and industrial research laboratories. | |

EDUCATION

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|-------------|---|--------------------------------|
| 2019 – 2022 | PhD, Quantum Computing | University of Cambridge |
| 2018 – 2019 | MPhil, Quantum Computing | University of Cambridge |
| 2015 – 2018 | BSc Physics | King's College London |
| | First Class Honours; top 5% of the year | |

SKILLS

Python ◦ Scientific Computing ◦ Data Analysis ◦ Linux/Unix ◦ Instrument Control ◦ Experimental Automation