

# MINJUN JEON

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## EDUCATION

<b>DPhil in Quantum Computing, University of Oxford</b>	<b>2022 - Present</b>
<ul style="list-style-type: none"><li>Research in silicon-based quantum computing under supervisor Prof. Simon Benjamin</li></ul>	
<b>Master of Mathematical and Theoretical Physics, University of Oxford</b>	<b>2017 - 2022</b>
<ul style="list-style-type: none"><li>2022: Distinction in MMathPhys: Master of Mathematical and Theoretical Physics</li><li>2021: First Class in BA classification of MPhys: Master of Physics</li></ul>	

## RESEARCH EXPERIENCE

<b>DPhil Project – Robustness of electron charge shuttling: Architectures, pulses, charge defects and noise thresholds</b> <a href="#">[PhysRevB.111.195302]</a>	<b>2025</b>
<ul style="list-style-type: none"><li>Numerically solved the Schrodinger equation to simulate the dynamics of wave function for shuttling an electron in a realistic semiconductor quantum device</li><li>Published in Phys. Rev. B</li></ul>	
<b>DPhil Project – Noise-aware Time-optimal Quantum Control</b> <a href="#">[arXiv:2504.00279]</a>	<b>2025</b>
<ul style="list-style-type: none"><li>Researched optimization of control pulses to find the minimum time for state-to-state transfer and quantum gate compilation in the presence of decoherence</li><li>Currently under review in PRXQuantum</li></ul>	
<b>DPhil Project – Characterisation of quantum dots using Deep Learning</b>	<b>2025</b>
<ul style="list-style-type: none"><li>Applied deep learning models in computer vision to classify the device operation regimes of the quantum dot spin qubits and find conditions for the formation of double dots.</li></ul>	
<b>Master's Thesis – Deep Neural Networks and Algorithmic Information Theory</b>	<b>2022</b>
<ul style="list-style-type: none"><li>Researched relational inductive biases in parameter function maps of different neural networks: Fully Connected Neural Networks (FCNN), Convolutional Neural Networks (CNN), and Graph Neural Networks (GNN) in Pytorch</li></ul>	

## WORK EXPERIENCE

<b>IBM Research – Research Scientist Intern</b>	<b>2025</b>
<ul style="list-style-type: none"><li>Research in quantum algorithms for the predictions of material properties combining ML.</li></ul>	
<b>Data Reply – Consultant Intern</b>	<b>2022</b>
<ul style="list-style-type: none"><li>Benchmarked optimization methods in classical and simulated quantum computers for the vehicle routing and optimal cell tower allocation problems in python</li></ul>	

## AWARDS & SCHOLARSHIPS

<b>Russel Studentship/Quantum Motion Theory Scholar – Quantum Motion Ltd.</b>	<b>2022</b>
<ul style="list-style-type: none"><li>Industrially funded studentship covering full tuition and stipend.</li></ul>	
<b>East Scholarship – Exeter College, Univ. of Oxford</b>	<b>2018- 2021</b>
<ul style="list-style-type: none"><li>GBP 200 awarded for excellent academic achievement.</li></ul>	
<b>Fitzgerald Award for academic excellence– Exeter College, Univ. of Oxford</b>	<b>2018</b>
<ul style="list-style-type: none"><li>GBP 110 awarded for excellent academic achievement.</li></ul>	
<b>Korea Presidential Science Scholarship – Korea Student Aid Foundation</b>	<b>2017 - 2022</b>
<ul style="list-style-type: none"><li>USD 50000/year, covering tuition, accommodation, and living expenses for 4 years</li></ul>	
<b>Silver Medal – International Young Physicists' Tournament, Yekaterinburg, Russia</b>	<b>2016</b>
<ul style="list-style-type: none"><li>Selected as a national representative and become a captain of a national team</li></ul>	

## Programming Knowledge

- Python: Advanced (Experience with Pytorch, Scikit-Learn, NumPy, SciPy, Jax, OpenCV, etc.)