MINH K. QUAN, PhD (Candidate)

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PROFESSIONAL SUMMARY

Research Scientist specializing in machine learning with expertise in federated learning and privacy-preserving AI for cyber-physical systems. PhD candidate with proven track record developing 94% accurate classification systems while maintaining strict privacy compliance. Published researcher with multiple IEEE papers on quantum-inspired algorithms and federated learning.

PROFESSIONAL EXPERIENCE

RESEARCH ASSISTANT | Deakin University | Aug 2022 - Present

- Pioneered 94% accurate waste classification system using computer vision and deep learning with privacy-preservation techniques
- Engineered federated learning architecture enabling decentralized model training while reducing network transfer by 78%
- Led cross-functional teams developing ML-powered medical devices achieving 85% correlation with clinical assessments
- Implemented quantum-inspired algorithms reducing computational complexity by 63% in production environments

SENIOR SOFTWARE ENGINEER | Skedulo | Ho Chi Minh City, Vietnam | Oct 2021 - Aug 2022

- Spearheaded optimization engine delivering 28% travel time reduction and 37% appointment capacity increase
- Architected scalable API integration layer achieving 45% efficiency improvement with 94% test coverage
- Implemented performance optimization strategies reducing load times by 52% for 50K+ daily users

SOFTWARE ENGINEER | Bosch Vietnam | Ho Chi Minh City, Vietnam | Jan 2019 - Oct 2021

- Implemented innovative algorithms for Engine Control Units improving fuel efficiency by 8% across production vehicles
- Developed automation tools reducing validation cycles by 30% while increasing test coverage by 22%
- Received "Best Performer H2 2020" award for contributions accelerating product delivery timelines

EDUCATION

DOCTOR OF PHILOSOPHY - PhD, ENGINEERING | Deakin University | 2022 - 2026 (Expected)
BACHELOR'S DEGREE, INFORMATION ASSURANCE | FPT University | 2016 - 2020

TECHNICAL SKILLS

- **Languages & Frameworks**: Python, Java, JavaScript, PyTorch, TensorFlow, SQL, MATLAB
- **Machine Learning**: Deep Learning, Federated Learning, Computer Vision, Quantum-Inspired Algorithms
- **Development**: API Design, Test-Driven Development, Agile/Scrum, Cloud Platforms

SELECT PUBLICATIONS

- "Federated Learning for Cyber Physical Systems: A Comprehensive Survey" - IEEE Communications Surveys & Tutorials (2025)
- "Quantum-Inspired Genetic Algorithm for Robust Source Separation" - IEEE ICC (2025)
- "Privacy and Fairness in Machine Learning: A Survey" - IEEE Transactions on AI (2025)
- "Towards privacy-preserving waste classification in IoT" - IEEE IoT Journal (2024)

AWARDS & CERTIFICATIONS

- Exemplary Reviewer Award - IEEE Open Journal of Communications Society (2023)
- IBM Data Science Specialization & Applied Data Science Capstone | Coursera (2021)
- "Best Performer H2 2020" - Bosch Vietnam