

One TrUE 3... Quantum Security you can count on, indefinitely.

Steal now, crack later is real. Bad actors are harvesting encrypted data today, just waiting for the Quantum computing power to decrypt its secrets. That's because in a few short years Quantum computers a hundred million times faster than today's classical processors will be attacking our cryptographic defences. The privacy and security our digital society relies on — from government, health and safety, to business and finance — everything will be under threat. Only Quantropi can provide TrUE protection — now and forever.

By delivering novel cryptographic solutions that preserve truth and trust, **Quantropi** is bound to become the new standard for Quantum secure data and communications solutions, no matter what. Our next-generation technology protects data in motion and data at rest — defending against both today's threats, and tomorrow's Quantum-based attacks. Powered by quantum mechanics expressed as linear algebra, Quantropi's patented solutions are uniquely capable of all three prerequisites for end-to-end cryptographic quantum security: **Trust**, **Uncertainty**, and **Entropy**.

Only TrUE Technologies...

1. Establish **Trust** between any two parties via MASQ™ — quantum-secure *asymmetric* encryption. (Licensable product coming soon.)
2. Ensure **Uncertainty** to attackers, rendering data uninterpretable forever, via QEEP™ — quantum-secure *symmetric* encryption.
3. Securely distribute Quantum **Entropy** — true random number generation and quantum-secure distribution to harden systems and networks against quantum attacks— via SEQR™.

All of Quantropi's TrUE Quantum-Secure cryptographic solutions are accessible via our flagship **QiSpace™ platform**. So governments, enterprises and developers can have confidence that their sensitive data and communications are, and always will be, secure and private. No matter where the future takes us.

Company

Founded 2018

Industry Space

Cybersecurity

Innovation Focus

Quantum Secure Data
and Communications Solutions

Patented Technologies

6 Patents granted, including core patents for *Quantum Entropy Expansion Protocol* and *Galois Public Key Envelope*; **5+ Pending**, including *Quantum Public Key Envelope* (innovative optical technology, not part of QiSpace™)

Licensable Products

MASQ™ Quantum-Secure Asymmetric Encryption (in development)

QEEP™ Quantum-Secure Symmetric Encryption

SEQR™

- Quantum Entropy as a Service (QEaaS)
- Quantum Delivery
- Digital QKD

Target Sectors

Government
Technology
Finance
Telco

Platform

QiSpace™ Platform

Technical Validation

2 papers published at IEEE Quantum Week 2020:

[Shannon Perfect Secrecy in a Discrete Hilbert Space](#)

[Quantum Public Key Distribution using Randomized Glauber States](#)

1 paper published at IEEE ICCS 2020:

[Generating Just-in-Time Shared Keys \(JIT-SK\) for TLS 1.3 Zero RoundTrip Time \(0-RTT\)](#)

1 paper published at IEEE ICCS 2021:

[Quantum Safe Lightweight Cryptography with Quantum Permutation Pad](#)

Awards and Recognition

- 2020 BOBs Best New (Ottawa) Business Award
- Berlin Falling Walls 2020 finalist
- TCS Canada Cyber Companies 2020
- TCS Canada Quantum Technologies 2021
- TCS B2B Program — Collision 2021

Supporters & Partners:



www.quantropi.com



QiSpace™ the First TrUE Quantum-Secure Platform for Enterprise

Whether it's hardening infrastructure and applications by enabling cloud and application developers to securely distribute strong random for "bring your own keys", replacing vulnerable PKI or digital signature schemes with an efficient PQC, or even enhancing or replacing AES itself — our next-generation technology enables a seamless transition to quantum security.

Easily integrated, rapidly deployed, with minimal investment in new hardware or infrastructure, **QiSpace™** is positioned to deliver major CapEx and OpEx savings. Our patented technologies are readily deployed on ANY existing network, over unlimited distances, at full network speeds. Making ours the only company in the world capable of quantum-secure key generation and distribution over TODAY's Internet.

Best of all, QiSpace™ requires minimal investment in new tech infrastructure. Customers can immediately harden their applications and processes to ensure quantum *resilience*, before seamlessly transitioning to 100% *permanent* quantum security.

Performance Highlights

SEQR™	<ul style="list-style-type: none"> ✓ 1 Gbps+ Quantum Entropy as a Service ✓ Transmission over 15,000KM
QEEP™	<ul style="list-style-type: none"> ✓ Compatible with lightweight and constrained devices ✓ 18x faster encryption than AES-256
MASQ™ (in dev)	<ul style="list-style-type: none"> ✓ Public Key 1-4KB, Private Key 192B ✓ Digital Signature: NIST Quantum Security Level 5, Short Digital Signatures 96B

Leadership: Hand-Picked, Experienced Team

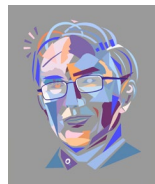


James Nguyen

Co-founder & CEO

Fintech executive with over 15 years of success; business strategist; emerging tech promoter; Ottawa forty under 40.

Purposeful leadership, with a focus on execution.



Dr. Randy Kuang

Co-founder & Chief Scientist

Renowned quantum physicist and serial entrepreneur, 25 years in telco and 35+ patents.

Sees what the scientific community cannot.



Michael Redding

CTO

30 years with Accenture, including as Managing Director & co-founder of Accenture Ventures; has driven global adoption of emerging technology across industries.

Engineering genius for simplifying the complex.



Ken Dobell

VP Marketing

Data-driven digital & programmatic performance media, ABM, lead generation & GTM leader; has created new demand & multiplied revenue 1000x.

Builds brands that punch above their weight.



Raj Narula P.Eng.

VP Business Development & Strategy

25 years working with Canadian tech companies to scale international partnerships, market and revenue growth; has placed over \$200M into emerging technology.

Integrates talent, skills & effort across the business.



Marco Pagani

Chairman of the Board of Directors

25 years tech enterprise leadership, past president of Nortel Networks (thousands of staff, billions in revenue); CEO, Ottawa Community Foundation.

Brings values-driven vision, strategy & insight.