The only *logical* alternative...
Is the best of all possible universes.

Our global digital society needs quantum-proof cybersecurity like never before. And now it's here. Fast, ultra-efficient and infinitely secure key exchange over the existing Internet. For quantum safety you can count on today, and Perfect Secrecy you can trust forever. No matter what the future network, or threat. **Bring it on.**
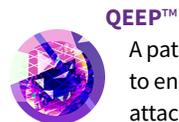
Introducing *Digital* Quantum-Secure Key Distribution.

A 100% Canadian innovator, Quantropi is bound to be the standard for quantum secure communication. Our next-generation technology enables enterprises to transition immediately to quantum-grade safety — with zero investment in new hardware or infrastructure. Best of all, our unique platform solution works over today's Internet — providing a simple, evolutionary upgrade path to critically improved security.

Why is Digital QKD the ultimate alternative? Imagine the same unconditional long-term security as photonic Quantum Key Distribution (QKD), minus its prohibitive cost and deployment challenges. That's the beauty of a logical system, unconstrained by physical limitations. It's effortlessly scalable.

Now imagine the same crypto-agility and real-world performance of Post-Quantum Cryptography, without the volatility and uncertainty of unknown quantum algorithms. That's the power of linear versus Boolean algebra. It's infinitely extendable.

Combine instantly achievable unhackable protection of sensitive data, with 100% existing network compatibility, and the obvious solution is… logical. **Digital QKD, only from Quantropi.**

QEEP™
A patented quantum gate technology that leverages quantum logic to encode keys in such a way as to make them uninterpretable to attackers, even given unlimited computing power and time.

QiSpace™
The world's first cloud-based Digital QKD solution that leverages QEEP™ to offer customers ease of integration and enterprise-grade performance at a fraction of the cost of existing QKD solutions (capex and opex savings of +90%).

CipherSpace™
The world's first quantum-safe file encryption application for end-users, offers Perfect Secrecy on-demand over the Internet (drag & drop encryption/decryption and sharing of any file type).

Company
Founded 2018

Industry Space
Cybersecurity

Innovation Focus
Quantum Secure Data Communications

Patented Technologies
QEEP™ Quantum Entropy Expansion Propagation

GPK Galois Public Key

QPKE Quantum Public Key Envelope (Pending)

Target Sectors
Government
Technology
Finance
Telco

Solutions
QiSpace™ Platform
CipherSpace™ Application

Technical Validation
2 papers accepted for publication at IEEE Quantum Week 2020:

Shannon Perfect Secrecy in a Discrete Hilbert Space

Quantum Public Key Distribution using Randomized Glauber States

1 paper accepted for publication at IEEE ICCCS 2020:

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

1 paper accepted for publication at IEEE ICCCS 2021:

Quantum Safe Lightweight Cryptography with Quantum Permutation Pad (forthcoming)

Awards and Recognition
• 2020 BOBs Best New (Ottawa) Business Award
• Berlin Falling Walls 2020 finalist
• Trade Commissioner Service eBook 2020
• TCS B2B Program — Collision 2021

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www.quantropi.com

quantropi®

Get ready for the quantum threat...
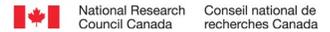# By being ready for *anything*.

The next global pandemic will be the cybersecurity threat from quantum computing. Already accelerating off the charts, it will inevitably break the security algorithms protecting today's Internet, putting at tremendous risk a hundred-trillion-dollar global economy. Preparation is not optional, but it need not be unaffordable.

That's because any enterprise which deploys Quantropi's platform achieves not only immediate quantum-proof security, but also ultra-efficient client-side implementation. Simply put, with QiSpace™, every secure action consumes less time and energy than its direct legacy equivalent. Less energy equals lower cost. In fact, with the advantage of gross savings on both energy and infrastructure, organizations will net a cost benefit over current installed technology that will only increase over time.

Improved algorithmic performance, enhanced customer and employee experiences, significant reductions in security-related latency, all with perfect secrecy — it adds up to powerful quantitative and qualitative gains driving straight to the bottom line.

With data and privacy security rising to the top of government, enterprise and institutional agendas — and a global QKD market expected to grow to $12B within 10 years — is it any wonder Quantropi will be the standard for quantum communications? **Take your business $2^n!$ today.**

Supporters & Partners:

National Research Council Canada / Conseil national de recherches Canada

McGill

TrustCAV

大成 DENTONS

DLS®

Mitacs

Quintessence Labs

wedge networks
securing the cloud connected world

Management Team

James Nguyen — Co-founder & CEO

Visionary business strategist, start-up enthusiast, rainmaker with 10+ successful years as banker, CIO, VP Asia for various companies in graphene, mining & energy storage tech, now focused exclusively on leading the crack team behind the world's first logical Quantum-Secure Key Distribution solution.

Dr. Randy Kuang — Co-founder & Chief Scientist

Quantum physicist and serial entrepreneur, with 25 years in telco and 35 patents. Directed research in quantum communication at Nortel and co-founded Inbay Technologies to develop identity and authentication solutions. IEEE selection committee member.

Michael Redding — CTO

Strategic, passionate sponsor of game-changing emerging technology. 30 years with Accenture, Managing Director & co-founder of Accenture Ventures. Exceptional track record of global partnerships and equity investments.

Jason Burke — CFO

Seasoned COO & CFO with over 25 years of operational and financial expertise in rapidly growing companies, including as CFO of IBM's Business Analytics Division.

Raj Narula P. Eng. — VP Business Development & Strategy

Seasoned technology executive, business builder with prior ops/ advisory roles in Recognia (Trading Central), Belair Networks (Ericsson), March Networks (Infinova), Sandvine (Procera), Neurolanguage (ADEC), Bridgewater Systems (Amdocs) and Co-Founder of TenXc Wireless (CCI) and TaraSpan.

Ken Dobell — VP Marketing

Data-driven performance marketing leader, digital media pioneer & award-winning brand strategist with 25 years of success as agency principal & consultant/advisor with KPMG, Fidelity, Eddyfi/NDT, Coveo, Keurig DrPepper, and more.

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