PractoCrypt Cryptography in Practice

Five-Day Hands-On Training Programme

Cryptographic Algorithms & Implementation







Training Objective

This five-day program provides a structured journey from fundamental cryptographic concepts to advanced post-quantum techniques, encompassing random number generation, hashing, authenticated encryption, and asymmetric cryptography. The learning experience is strengthened through practical implementations and live demonstrations.

Key Takeaway

- Cryptographic Schemes & Implementation
- Hands-on with Crypto Libraries
- Application Integration Skills
- Algorithm Selection & **Evaluation**
- IoT/Embedded Security & **PKI Protocols**
- Designing Custom Protocols

Target Audience

- Research Scholars in Cybersecurity & Cryptography
- Developers of Cryptographic **Applications & Protocols**
- Software & Hardware Engineers using Crypto Libraries
- Security Professionals & QA Teams in Cryptography
- Technical Leads & Engineers in **PQC Migration**

Coordinator

Co-Coordinators

Mr T Santhosh Kumar Scientist - C

Dr Shashikant Pandey Scientist - C

Samyuktha M Scientist - C

Training Schedule

Day 1 - Basic Concepts | CSPRNG | Hands-on Practical Session on CSPRNG Concept

> Day 2 - Hashing Algorithms | SHA-3 & BLAKE2s Concepts | Hands-on Practical Session

Day 3 - Symmetric Crypto |Authenticated Encryption | CHACHA20-POLY1305 & ASCON | Hands-on Practical Session

> Day 4 - Asymmetric Crypto | ECC (DSA and KEX) | ECDSA-ECDHE-Curve25519 Hands-on Session + CTF Game

Day 5 - PQC | ML-DSA & ML-KEM Hands-on Practical Session | TLS demo using ML-[DSA & KEM]

Fee Details ₹10000 + 18% GST Venue SETS Chennai

Contact Details

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Coordinator 044-66632506



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Registration Link

https://forms.gle/eh1kdHzg6j1yeLvE6

For more details, please visit https://setsindia.in/practocrypt

Organized by



Society for Electronic Transactions and Security (SETS)

(Under the O/o Principal Scientific Adviser to the Government of India) Cybersecurity Research and Development Organisation

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