

INDIVIDUAL CONSULTANT REQUIRED

Information Technology University requires the services of a Qualified, Energetic & Self-motivated Individual as a short term consultant for its Funded Research Project supported by the Pakistan Academy of Sciences. Applications are invited for the following consultancy from Individuals who meet the specified criteria:

Sr. No.	Title of Consultancy	No. of Individuals
1	Research Software Engineer	01

Qualification & Experience

- Must have at least BS or 16 years of education from an HEC recognized university in Computer Science/IT/Software Engineering/Electrical Engineering/Technology Management or an equivalent recognized degree from an institution or university recognized by HEC.
- Experience of working on PKI related solutions.
- Experience with SubCA integrations.
- Hands-on experience in smart contract development using Solidity or equivalent languages.
- Experience with backend and frontend technologies (Javascript, Node.js, Express, Python) and RESTful APIs.
- Relevant experience in blockchain development with deep understanding of distributed ledger technologies, cryptographic principles, and consensus mechanisms.

Instructions

1. The above required consultant shall be engaged for short term consultancy by following Punjab Procurement Rules, 2014.
2. Detailed Terms of Reference (TORs) are attached herewith.
3. The duration of the consultancy engagement is six (6) months.
4. Incomplete/pruned (having cutting) / unsigned/ application based on incorrect information received after due date shall be rejected.
5. Only shortlisted individuals will be called for interview.
6. Application along with the credentials must reach in the Procurement Wing of ITU (6th Floor, Arfa Software Technology Park, 346-B Ferozepur Road, Lahore) on or before **16/04/2025**.
7. Only those Individuals having degrees from HEC recognized university/ college/ institute or well reputed foreign university recognized by HEC shall be considered.
8. No TA/DA shall be admissible when called for interview or joining the service.

DEPUTY DIRECTOR (PURCHASE)**INFORMATION TECHNOLOGY UNIVERSITY (ITU)**

6th Floor, Arfa Software Technology Park, 346-B, Ferozepur Road, Lahore.

Phone: (042) 111-111-488

Web: www.itu.edu.pk

Terms of Reference (TORs) of Staff and Consultant In-house Project: “Domain Validation of SSL/TLS Certificates”

“Research Software Engineer”

Funded by Pakistan Academy of Sciences

Position Title: Research Software Engineer

Terms of Reference: Software Engineer position

Project Duration: (1 April 2025 – 30 January 2026)

Consultancy Duration: 06 months (1 April 2025 – 30 September 2025)

Location: Information Technology University Lahore

Department: Faculty of Sciences

Reports to: Principal Investigator (PI), Dr. Muhammad Umar Janjua

Purpose

To design, develop, and implement PKI-based solutions, certificate management, compliance, subCA integration and blockchain integration ensuring scalability.

Key Responsibilities

- API integration with Root CA issuance service, including secure API connections (mutual TLS or Root CA's authentication methods), endpoints for issuance/renewal/revocation, and error handling with fallback mechanisms.
- Implementation of certificate validation methods (HTTP challenge posting, DNS validation automation, and email-based workflows).
- Certificate lifecycle management, including issuance, revocation, renewal, expiry notifications, and ACME client (e.g., certbot) integration.
- Development of customer-facing features: user onboarding with identity verification (basic KYC), dashboards, manual CSR upload, automated certificate issuance, download options, billing, and invoicing automation.
- Support services including basic ticketing/contact flows, issuance/revocation history tracking, and audit logging for compliance.
- Ensuring compliance by finalizing CP/CPS, achieving pre-audit readiness for WebTrust, and implementing strong security measures including Root CA API.
- Operations management such as preparing customer onboarding documentation, providing guides, and maintaining a marketing website with product information and signup funnels.

Qualifications

Must have at least BS or 16 years of education from an HEC recognized university in Computer Science/Information Technology/Software Engineering/Electrical Engineering/Technology Management or an equivalent recognized degree from an institution or university recognized by HEC.

Experience/Skills

- Experience of working on PKI related solutions and SubCA integrations
- Hands-on experience in smart contract development using Solidity or equivalent languages.
- Experience with Back/Frontend technologies (Javascript, Node.js, Express, Python) and RESTful APIs.
- Relevant experience in blockchain development with deep understanding of cryptographic principles, and consensus mechanisms.

Payment Mode

Salary will be paid (Rs. 150,000/month) provided the satisfactory evaluation report from the PI.