

“ This project involves working with an academic at City St George’s in the department of computer science. The academic will supervise and guide your work alongside being your consultant and marker.

Contact details:

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Project title: Application Development Using the Veild Application Framework

Keywords: networking, privacy, anonymity, peer-to-peer, distributed applications, anti-surveillance, cryptography
Description: The Veilid framework (<https://veilid.com/>) is a recent developed collection of protocols to build distributed, private applications. It builds on the onion routing ideas used by Tor and I2P as well as distributed hash tables and routing as used in IPFS and others. It aims to make developing highly-scalable, distributed, private applications easy. Veilid is still very much under active development, so this project would aim to create a proof-of-concept / example application to demonstrate some of its features. Possible applications:

- A multi-user notepad / text editor.
- An anonymous voting system.
- An anonymous question submission system.
- A SOCKS proxy

Plan:

1. Learn the key concepts involved including onion routing and distributed hash tables.
2. Set up a Veilid node and try out the demo application.
3. Develop your own application!

Skills: Knowledge of networking and cryptography, software development on Linux, reasonable programming ability.

Project description:

Ideal Project Outcomes:

1. A network application that uses the Veilid Framework.
2. A demonstration of the application.

Additional Information

Contact Martin for more information.
