

Anjali Patel @ Corporation

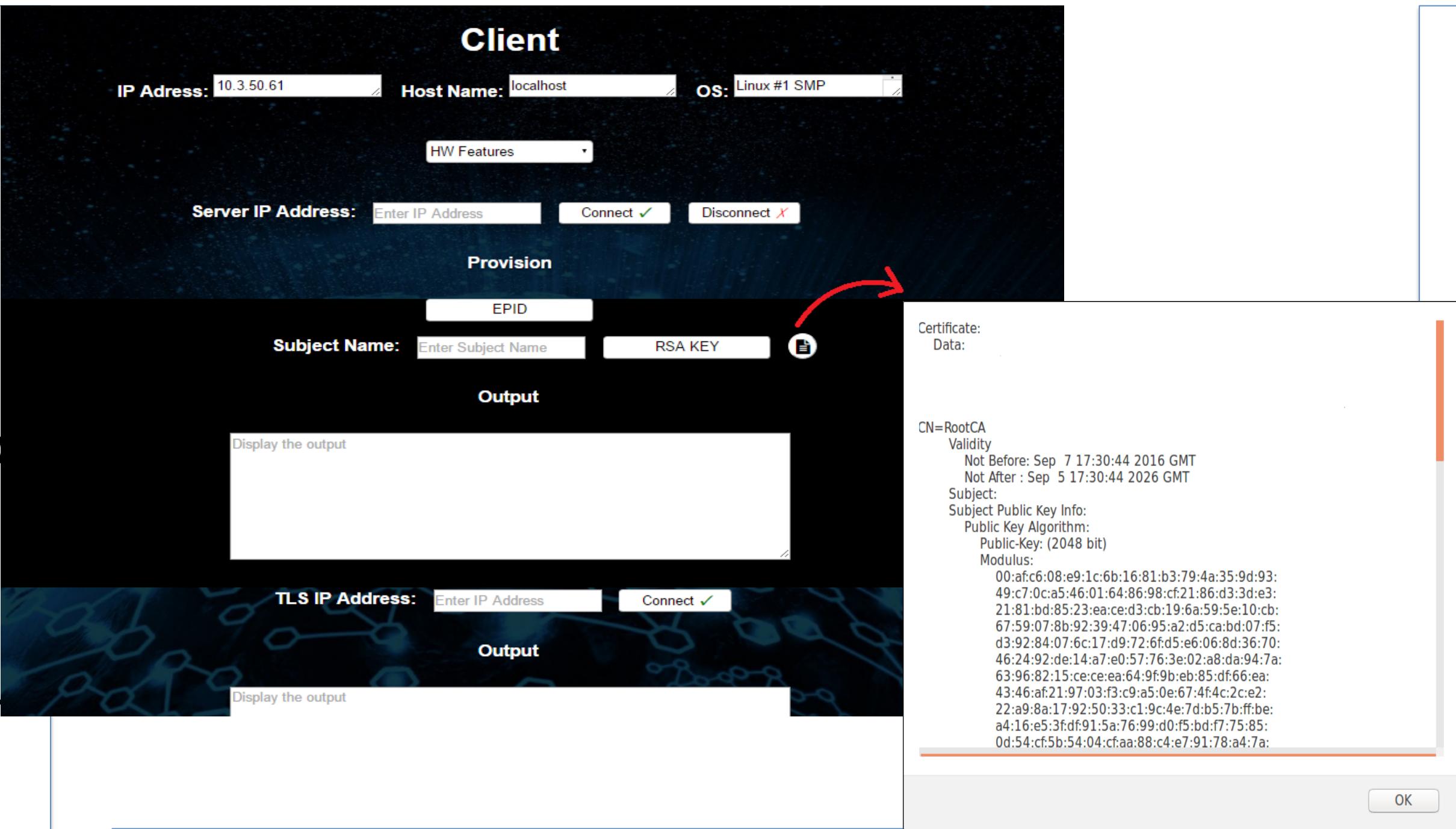
◆ Software Engineering Intern

◆ Santa Clara, CA (07/11/16 – 09/16/16)

This summer, I developed user friendly web application with backend implementation to allow for demonstrating security features for Intel IOT platform, and to control these security operations

Achievements

- Designed and developed frontend according to given requirements for IOT platform
- Used and modified open source REST application web frame to support frontend behavior, and to create object according to http request from frontend
- Created and modified Makefile, and wrote functions by using socket programming and C to establish connection with TLS and DAL server and to create responding objects according to http request from frontend
- Connected web application's backend with embedded library which talks to hardware to set up secure session and to transfer keys
- Wrote JQuery and Ajax functions to send http get and post request to backend which receive request and respond back to frontend with output that we get from hardware.
- Developed Unit Test for backend that talks to hardware to verify basic functionality
- Improved my coding and debugging skills
- Gained great understanding of how hardware and software works together; therefore, I look forward to learn more about hardware and networking concepts at UCSD classes
- Most of the time I spent at work is for setting and figuring things out, debugging and finding errors.



Perks & highlights

- Fun, relaxed, friendly and welcoming work environment that allows employee to enjoy working everyday
- Great place to learn new technologies and meet intelligent and interesting people
- Offers free fruits, free gym access and some exercise classes to stay healthy

Technology I learned

- JQuery, Ajax, JavaScript, Socket Programming, Networking Concepts, Writing Makefile, Connecting Software with Hardware and Unit Testing

Connection to UCSD

- **Useful courses:** CSE 100, CSE 110, ENG 100L, COGS 187A, CSE 12, CSE 15L, CSE 120
- CSE 110, COGS 187A and ENG 100L, self learning in this project classes, gave me basic foundation of developing website by using HTML, CSS, Bootstrap and JavaScript
- CSE 100 and CSE 12 prepared me write code in backend REST API in C, and these classes also gave me good understanding of C++ backend libraries
- Client/Server secure communication concept that I learned in CSE 120 class gave me good understanding of security problem in IOT platform
- This internship inspired me to take networking and client/server side classes to follow up on what I have learned during internship

