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Objective

Use Computer Science knowledge to efficiently solve real world problems through full time opportunities.

Education

Bachelor of Science in **Computer Science** (Expected: May 2018)
Minor in Economics
Overall **GPA**: 3.81

Relevant skills

Go, C/C++, Python, Java, Discrete structures, Data Structures and Algorithms, Computer Architecture, Systems programming, Game Theory, Scientific Presentation, Micro, Macro & Managerial Economics, etc.

Experience

- **Software Developer Intern at Hewlett Packard Enterprise (May 2017)**
  Working with networking division under **Aruba Networks** to implement a full stack application to aid in debugging network errors through an Aggregation Switch.
- **Undergraduate Research Assistant at Purdue Computer Science Department (May 2015)**
  - Supply Chain Management System with Product Source Backtracking
    Designing a supply chain management system using a blockchain oriented approach with research team. Implemented a prototype in Go using the Hyperledger project by IBM to design a full stack application to track products with RFID tags through the supply chain to deter counterfeit goods.
  - Secure File Transfer using Cryptocurrencies
    Implemented a prototype for a data transfer protocol using cryptography primitives such as oblivious transfer and zero knowledge proofs to enforce trust between parties by embedding Bitcoin signing keys in the transferred data. Key knowledge acquired for the project included cryptographic hashing, watermarking, oblivious transfer protocol, blockchain primitives, bitcoin scripts, smart contracts, traitor tracing and other related fields in order to design the intended system and provide adequate applications to it.
- **CS180: Java Programming Undergraduate Teaching Assistant at Purdue (Jan 2015)**
  Recruited by the teaching staff to assist in teaching the Java programming course for the semesters to follow.

Projects

- **Operating Systems Programming and Kernel development (2017)**
  Modified the XINU operating system kernel designed by Prof. Douglas Comer to implement signal handling, restructuring ready lists, process scheduling, semaphore lists, message passing and call back functionality to create powerful applications on embedded systems.
- **Unix Shell (2016)**
  Designed a UNIX compatible shell with IO Redirection between commands, Pipes between commands, Background and Zombie process handling, Environment variables, cd command, Wildcarding, signal handling, Robustness (limiting the no. of crashes), subshell, tilde expansion and Line editor. Coded in C and utilized Valgrind for debugging.
- **Memory allocator in C (2016)**
  Implemented memory allocator in C for systems programming course. Utilized coalescing on free list data structure on heap memory space. Also covered memory allocation by C and C++ of runtime objects to the memory's Heap, Stack or BSS. Used debugging tools like gdb and ddd

Leadership and Awards

- **Recipient of Purdue Summer Stay Scholarship & Position in Cryptography Research Team**
  Received a scholarship for full tuition for summer classes to join the research team at Computer Science program at Purdue University.
- **President of Purdue Boxing Club (2014)**
  Elected in a leadership role at the PBC. Driving the club to improve visibility on digital platforms and social media. Also working to secure more funding and facilities from the university for a better member experience.
- **Semester Honors and Dean's list (2014)**
  Received Semester Honors and Dean's list in 2014, 2015, 2016 and spring 2017.