Karthik Bhattaram

San Jose, CA, karthik.bhattaram.1@gmail.com, (415)-605-9721, LinkedIn profile, Website

Technical Skills

Programming Languages: C/C++, CUDA, Python, Java, Shell, Verilog, JavaScript, HTML, CSS
Technologies/Frameworks: Scapy, Numpy, OSI Model, TCP/IP, Linux, Bash
Developer Tools: Vim, Emacs, Visual Studio Code, GitHub

Internships

Software Development, Summer 2024: OpenEye Scientific

Technologies Used: Scapy, YAML, Python3

- Performed data analysis on large molecule databases to determine typical chemical characteristics of drug candidates
- Applied feature and performance improvements to drug discovery software written in CUDA C++

Hardware Architecture, Summer 2023: Cadence Design Systems

Technologies Used: System Verilog, Python3, Xcelium

- Developed an automation tool for making memory wrappers based on foundry-provided memories
- Control signals, input/output ports, chip selection, etc. were considered.

Hardware Verification, Summer 2022: Axiado Corporation

Technologies used: Scapy, YAML, Python3

- Applied and improved upon the testing infrastructure created the previous Summer.
- Discovered multiple bugs in the company's network security system-on-chip by designing various packet flows based on network and network security protocols.

Software Development, Summer 2021: Axiado Corporation

Technologies Used: Scapy, YAML, Python3

- Developed testing infrastructure for the company's network security system-on-chip.
- Created network packets based on TCP, IP, ICMP,IPSec, MACsec, TLS, etc.
- Published findings in the form of a research paper.

Honors

- UCSB Regents Scholar
  - Merit scholarship awarded to the top 2% of students
- UCSB Engineering Honors
  - Program to enrich the educational opportunities for outstanding students within the college
- IBM Certificate: Python for Data Science and AI
- Certified Enterprise Security Professional

Education

University of California, Santa Barbara/ Computer Science B.S. and Minor in Statistics

Santa Barbara, CA / Expected Graduation: June 2026

Relevant Coursework:

- **Data Structures and Algorithms, Computational Science, Algorithms Engineering, Finite Automata, Computer Communication Networks, Deep Learning, Artificial Intelligence, Advanced Applications Development, Object Oriented Programming in C++**
- **Linear Algebra, Differential Equations, Probability and Statistics**

De Anza College, Cupertino/ Certified Enterprise Security Professional, Certificate
Cupertino, CA / Graduated June 2022 / Concurrently Enrolled While in High School

Relevant Coursework:

- **Object Oriented Programming in Java, Personal Computer Security, Network Security, TCP/IP Protocol Suite, Ethical Hacking, Advanced UNIX/Linux, x86 Assembly**
- **Discrete Math, Vector Calculus, Multivariable Calculus**