

Himanshu Kattelu

Himanshukattelu@gmail.com | 84-16 Elmhurst Ave. Apt. 4E, New York, NY, 11373 | +1 347-610-7246

Education

Stony Brook University

B.S in
Computer Science
Applied Mathematics and Statistics

GPA: 3.8/4.0
Stony Brook, NY
Expected 2018

Languages

Proficient: Java, HTML, CSS
Experienced: C, JavaScript, Sass
Familiar with: MATLAB, MIPS

Software

Frameworks:
Bootstrap, JQuery

Operating systems:
Windows, Linux(Ubuntu)

Other:
Git, Jekyll, LaTeX, FFMPEG

Coursework

Current

Analysis of Algorithms, Intro to
Security Fundamentals, Time-Series
Analysis, Intro to Visualization

Past

Computer Science A, B Honors,
Systems Fundamentals I, II,
Theory of Computation Honors,
Technical Writing, Linear Algebra,
Finite Mathematical Structures, Data
Analysis, Probability Theory,
Operations Research

Organizations

Theta Tau, Hula-Hoop Enthusiast's
Club (Treasurer), PUSO Ballroom,
PUSO Cultural

Honors

Presidential Scholarship
CSE Honors Program

Links

Website: hkattelu.github.io
Linkedin: [/in/himanshukattelu](https://in.linkedin.com/in/himanshukattelu)
Github: [Hkattelu](https://github.com/Hkattelu)

Projects

File Compressor

May 2016 - June 2016

- Implemented a command-line file compressor in C to compress files by over 50% and decompress them without information loss
- Examined various compression algorithms for methods and investigated them to determine which method is optimal under certain scenarios
- Designed a bit-based file I/O system in C to further optimize compression by writing in bit units instead of byte units

Chat Client

Apr 2016 - May 2016

- Collaborated with a partner using git to build a server-client based chat program entirely in C to connect at most ~4000 simultaneous users to chat
- Utilized sockets to send/receive messages between systems and followed a password login protocol to ensure secure communications
- Programmed a multi-threaded login process to allow multiple users to log in at once without tampering shared resources

CryptCoin

Oct 2015 - Dec 2015

- Developed a cryptocurrency miner and transaction system in Java following the specifications of the Bitcoin currency
- Analyzed the Bitcoin white papers and modeled the system using various UML diagrams to depict the Bitcoin mining protocol
- Prepared a webpage to document the classes and use cases involved as well as to display and explain details of the project to others

Personal Website

June 2015

- Constructed a website from scratch using HTML, CSS, and Javascript to put projects, files, and information on.
- Produced a static-site blog using Jekyll, hosted it on a personal domain to write blog posts, and added styling using Sass
- Maintained and updated the site using Github to routinely push new blog updates, design changes, and bug fixes to improve the website quality

Work Experience

Resident Assistant | Stony Brook University

Aug 2016 - Present

- Facilitate a positive living environment for 33 residents in dormitory by mediating conflicts, enforcing housing policies, and maintaining a bulletin board
- Collaborate with staff to implement programming for residence hall by budgeting money, designing programs, and promoting events
- Work in RA office weekly to respond to resident questions, answer telephones, and operate office equipment

Front-end Developer Intern | Vizalytics Technology Inc.

July 2016 – Aug 2016

- Contributed to the full stack development process by converting mock-up designs to websites for clients using HTML, CSS and Javascript
- Applied mobile-first, responsive design on websites by using CSS media queries and the Bootstrap grid system
- Assisted in quality assurance for existing websites by rigorously testing the software to find errors and log issues

Student-Athlete Tutor | Stony Brook University

Sept 2015 – Dec 2015

- Tutored student athletes in various math subjects ranging from Algebra to Calculus to prepare them for homework assignments and in-class exams
- Wrote 20 reports each week (One per student) to track individual academic progress and to identify struggling students
- Communicated with other tutors and coaches to develop better ways to teach students and improve their academic performance

Research Assistant | Stony Brook University

May 2015 – Sept 2015

- Utilized MATLAB for image and video processing to assist in the development of an engine to search inside a video
- Wrote a function library to locate a GIF inside a video while accounting for differing framerates, brightness and video resolution
- Improved function speeds by writing rigorous test cases to maximize efficiency using HOG image comparisons, dynamic time warping, and frame mapping