

Vikram Rao

Education

2015-2019 University of Maryland, College Park, MD,

(exp.) Bachelor of Science in Computer Science, 3.94/4.00 GPA.

Enrolled in the Advanced Cybersecurity Experience for Students (ACES) Honors College

Relevant Coursework

- o CMSC430 Introduction to Compilers
- o CMSC426 Image Processing/Computer Vision
- o CMSC351 Algorithms
- o CMSC330 Organization of Programming Languages

Skills

- o Languages (in order of familiarity): Java, OCaml, Python, C, Bash, Fortran
- o Operating Systems: Linux (Ubuntu, Debian, Kali), Mac OSX
- o Miscellaneous: Wireshark, git, gdb

Work Experience

Summer 2016 **Summer Programming Intern**, *Alexander Ken*, National Oceanic and Atmospheric Administration, College Park, MD.

Prototyped a framework for passing satellite image data from Java to scientific algorithms in Fortran for processing.

- o Used a custom Java heap-allocated data structure for efficient native data-processing calls
- Evaluated different data flow paths for optimal efficiency

Summer 2014 Summer Programming Intern, Dr. Charles Schwieters,

National Institutes of Health, Bethesda, MD.

Added graphical access to functions previously available exclusively through the command line in VMD-XPLOR, a globally used protein modelling program.

- o Gained fluency in Tcl/Tk and python while working with production code
- o Self-directed research into language concepts to complete time-sensitive projects
- o Committed updates with bazaar and gained experience with logging changes

Major Honors

- o National Merit Scholarship Finalist
- University of Maryland President's Scholarship
- o National AP Scholar

Extracurriculars

2015 Competed in hackathons: Daemon Dash, MHacks, Bitcamp.

2015-present Competed in CTFs including: picoCTF, National Cyber League, Metropolis, Parsons CTF 2015.