William Klees

EDUCATION

University of Maryland, College Park — Expected Graduation: December 2027

- Bachelors of Science in Computer Science
    - College Park Scholars – Public Leadership

WORK EXPERIENCE

- Naval Research Enterprise Internship Program, Naval Research Lab (October – December 2025)
- Booz Allen-Hamilton Summer Games Cyber Intern (June 2025 – August 2025)
    - Over 10 week period, performed reverse-engineering and vulnerability analysis / penetration testing on a piece of industrial networking equipment in a team. Developed proof-of-concept denial of service exploit and presented on my work.
- saved.gg Backend Software Engineer (October 2024 – November 2024)
    - Working with the Python and FastAPI technologies to deliver a responsive user experience, generating key highlights from video clips, and working with databases.
- University of Maryland ECE Department Intern (June 2023 - January 2024)
    - Worked under Dr. Sahil Shah to design an SPI communications module on an FPGA, and subsequently gained technical writing experience from writing a paper about my work, subsequently putting together a poster and gave a presentation about the work.

SKILLS

- Technologies: Network sockets, 3D graphics, FastAPI, Win32/COM API, Linux, Ghidra/Ida
- Programming languages: C/C++, R, C#, Python, MATLAB, Java, JavaScript/HTML, Visual Basic
- Experienced in systems-level programming and computer architecture; x86, MIPS, and ARM assembly
- Embedded development experience with microcontrollers and FPGA design in Verilog

PROJECTS

- Developed an emulator and debugger (“EmuWOW”) for the x86, MIPS, and DEC Alpha processors to enable running Win32 applications compiled for different CPUs to run on standard x86 PCs by thunking API calls, capable of running the MIPS versions of WinMine, Reversi, FreeCell, and PaintBrush on x86
- Wrote a game (“Starblazer II”) with 16-way online multiplayer and a software 3D renderer, with ports for Win32, MS-DOS, Linux, and Nintendo Wii
- Wrote a compressor and decompressor for an MPEG-like video format with DCT-based intraframe compression and RLE-based interframe compression with huffman coding

RELEVANT COURSEWORK TAKEN

Calculus I/II, Linear Algebra, Algorithms and Data Structures, Analysis of Algorithms, Computer Graphics, Multivariable Calculus, Statistics, Intro to Networking and Cybersecurity, Computer Systems, Discrete Structures

LEADERSHIP & INVOLVEMENT

- Public speaking & presentation experience
    - Montgomery County High School Forensics League Finalist (2023, 2024)
    - Montgomery County High School Debate Semi-Finalist (2023, 2024)
    - Montgomery Blair High School Cybersecurity Team Captain (2023-2024)