
CONTACT INFORMATION	<p>Homepage: https://www.haydencoffey.com LinkedIn: www.linkedin.com/in/hcoffey1 ✉ E-mail: hjcoffey@wisc.edu Tel: (+1)865-789-0748</p>
RESEARCH INTERESTS	<ul style="list-style-type: none"> • Compilers, operating systems, memory systems, and computer architecture.
EXPERIENCE	<ul style="list-style-type: none"> • Graduate Research Assistant, University of Wisconsin-Madison 2021–Present Currently working under the direction of Dr. Michael Swift on a LLVM-based IR/MIR block profiler to provide instruction mix and bandwidth statistics for data intensive applications on RISC/PIM/PNM platforms which may lack hardware performance counter support. • University of Tennessee, Knoxville <ul style="list-style-type: none"> ◦ Systems Research: 2019–2021 Worked under the direction of Dr. Michael R. Jantz on a system that utilizes a modified Zswap program to automatically mark, compress, and manage cold data. ◦ Human-centric Software Research: 2018–2019 Worked under the direction of Dr. Austin Z. Henley. Collaborated with Oregon State University on the development of an Electron based IDE written in Typescript. ◦ Teaching Assistantships (The University of Tennessee, Knoxville): Computer Organization (COSC 130), Computer Architecture (COSC 530), and Data Structures and Algorithms II (COSC 302). • Software Engineer Intern, SAIC Summer 2019 Worked in Java. Focus of internship was refactoring an existing code base to use new software models. Received secret security clearance.
EDUCATION	<p>University of Wisconsin-Madison, Madison, WI 2021–Present</p> <ul style="list-style-type: none"> • Pursuing Ph.D. in Computer Science <ul style="list-style-type: none"> ◦ Advisor: Dr. Michael Swift. <p>University of Tennessee, Knoxville, Knoxville, TN 2015–2021</p> <ul style="list-style-type: none"> • M.S. Computer Science GPA: 3.97/4. <ul style="list-style-type: none"> ◦ Advisor: Dr. Michael Jantz. • B.S. Computer Science, <i>summa cum laude</i> GPA: 3.95/4. <ul style="list-style-type: none"> ◦ Minor: Mathematics.
TECHNICAL SKILLS	<ul style="list-style-type: none"> • <i>Programming Languages:</i> C/C++/C#, Python, Rust, Haskell, Java, Type/Javascript. • <i>Software:</i> LLVM, OpenMP, Open MPI, SDL, CUDA, Unity, Godot.
SELECTED PUBLICATIONS	<ol style="list-style-type: none"> 1. M. Adeli, N. Nelson, S. Chattopadhyay, H. Coffey, A. Henley, and A. Sarma, “Supporting Code Comprehension via Annotations: Right Information at the Right Time and Place”, in <i>2020 VL/HCC</i>, Aug. 2020
HONORS AND AWARDS	<ul style="list-style-type: none"> • Tau Beta Pi: Engineering Honors Organization. • University of Tennessee, Chancellor’s Honors Program: Liberal arts honors program with focus on volunteer service and research. • Eagle Scout: Boy Scouts of America.