

Ashley Knutsen

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work	BRINC Drones — Senior Embedded Engineer	2023 – Present
	Created Python test environment and tools to assess 200 regression test runs per day	
	Drove CI/CD refactor to deliver an efficient release process with reproducible builds	
	Organized maintenance and distribution of hardware used for testing	
	Coordinated tests for software releases daily leading up to the launch of Lemur 2	
	Owned developing deployable Python infrastructure for consistency across teams	
	Managed test data with AWS tools such as EC2, DynamoDB, S3, and Lambda	
	Sonos — Software Engineer, Control API	2021 – 2023
	Added features to the Python script that generates the C++ code for all product APIs	
	Debugged a variety of runtime errors occurring on the embedded Linux speakers	
	Provided documentation that codified team best practices for our on-call rotation	
	Created a GitHub Actions workflow to provide a clang-format label for GitHub reviews	
	Amazon — Embedded Firmware Engineer	2019 – 2021
	Contributed to firmware application development on the Alexa Loop	
	Collaborated on integration test framework for rapid development on the Halo View	
	Developed and deployed testing strategy for update stress test on Alexa Loop	
	Microsoft — UEFI Firmware Engineer	2017 – 2019
	Facilitated core UEFI support for the release of Windows for the NXP iMX8	
	Modernized Python build tools for broader use in the open source community	
	Designed and implemented individual driver update scenarios to improve serviceability	
	Provided tools to capture and analyze security status of a host machine during boot	
	Developed functional tests to verify the functionality of UEFI memory protections	
	Facebook — Intern, BLOB Storage	2014 – 2016
	Cougaar Software — R&D Intern, Robotics	2014 – 2016
school	University of Maryland, Baltimore County	2016
	Received a BS in Computer Science with a 3.3 GPA	
	Founding member, lead programmer, treasurer, and mentor for UMBC's VexU team	