IRI Final Presentation

Kaushik Devireddy
Here’s what I started with

Kaushik Devireddy (2021-2022)
Crypto Firewalls: Secure Standards for Connected Cryptocurrency Wallets
Mentor: Venky Harinarayan
Year: Sophomore
Major: Computer Science
I wrote some code to pursue this idea

But more importantly, I learned to open-source
Fortunately for the community, this topic started receiving lots of attention.

Unfortunately for me, many people had the same idea I did and did it better.

**Bug finding tools**
- **Echidna** - Fuzzer for Ethereum smart contracts. Uses property testing to generate malicious inputs that break smart contracts.
- **Manticore** - Symbolic execution tool for Ethereum smart contracts that includes detectors for common security flaws
- **Mythril OSS** - Open-source security analysis tool for Ethereum smart contracts built around detector modules
- **Securify** - Static analysis tool from ChainSecurity
- **Slither** - Static analysis framework, written in Python, with detectors for many common Solidity issues

**Verification tools**
- **KEVM** - K Semantics of the Ethereum Virtual Machine (EVM)
- **Manticore** - Symbolic execution tool for EVM
I wasn’t sure what to do, but I had a feeling the same idea could be applied to cloud environments.

I submitted a last-ditch abstract to a security conference (SANS CloudSecNext) with a very rough idea.

However, I wasn’t feeling very motivated, having to start from scratch.
But then I got accepted, so I had to work really fast to code a prototype and create a presentation.
Low-hanging Logs: GCP & Azure Logs for Lazy People

Kaushik Devireddy, University Researcher, Dassana
Steve-o Mitchell 11:53 AM
replied to a thread: Minecraft HYPE!
Instant street cred.

Majed Haj Mohamad 11:53 AM
😊

Aaron Lancaster 11:59 AM
Yay!
Logs or it didn't happen!

Eric Johnson (SANS) 11:57 AM
I'm digging that UCLA flag in the background

Is that the equivalent of whoami for secrets exec?

Pinned by AJ Yawn (SANS).

Carsten 12:08 PM
What are your thoughts on using Azure Log Analytics and Azure Sentinel?

Dennis Chow 12:08 PM
nice, open source detections. i wonder if if they're going to also expose

Raymond Gould 12:13 PM
Excellent presentation...ty!

Megan R 12:14 PM
great job!

Patsy Anderson 12:14 PM
great talk, thanks!

Brian D 12:14 PM
Very good presentation!

Carsten 12:14 PM
great presentation!

Marcos 12:14 PM
Amazing work!

Siddhartha Rao 12:14 PM
Great presentation. @Kaushik Devireddy!
I got more motivated from the positive feedback, so I extended my idea to verify AWS environments and submitted to a much more competitive conference.


Hi!

We have received your proposal "Formal Methods for Cloud Security: Overhyped?" to fwd:cloudsec. We will notify you once we have had time to consider all proposals, but until then you can see and edit your proposal at https://prealta.com/fwd-cloudsec-2022/me/submissions/8HMG7Q/.

Please do not hesitate to contact us if you have any questions!

The fwd:cloudsec organisers
Update on your fwd:cloudsec submission

We’ve completed the first round of reviews of fwd:cloudsec papers, and while your paper “Formal Methods for Cloud Security: Overhyped?” was not in the first batch we accepted, we’d like to encourage you to revise &

This talk was the most polarizing we discussed. The topic area - a counterintuitive, rabble-rousing takedown of something AWS hypes relentlessly - is very on brand for this conference; we can easily imagine

However, “extraordinary claims require extraordinary evidence” and so we’d like to see this talk either develop its thesis more, or be more clearly balanced (after a rabble-rousing pitch up front). While Tiros and Zelkova
Hi!

We have received your proposal "Stop Guessing and Start Proving: Demystifying AWS Zelkova" to fwd:cloudsec. We will notify you once we have had time to consider all proposals, but until then you can see and edit your proposal at https://pretalx.com/fwd-cloudsec-2022/me/submissions/RVRGHQ/.
I got accepted 2 days ago!

I will be presenting in Boston on July 25th (right before AWS Re:Inforce)
Thank you!

Professor Kleinrock
Venky
Bill