Shiva Shashank Kusuma

(940) 758-4074 | shashanktechcs@gmail.com | linkedin.com/in/shashankpie | github.com/shashankpie

Education

University of Alabama	*Huntsville, AL*
Master's in **Cybersecurity**	Expected: **Dec 2025**
Master's in **Computer Science** – 3.6/4.0 CGPA	Graduated: May 2024
SR Engineering College	*India*
Bachelor's in **Computer Science** – 3.15/4.0 CGPA	Aug 2016 – Nov 2020

Technical Skills

Languages: JavaScript (ES6+), TypeScript, HTML5, CSS3, Python, SQL (MySQL), Assembly Language (x86)
Technologies/Frameworks: React, Redux, Next.js, Node.js, Express.js, Tailwind CSS
Tools/Platforms: Git/GitHub, Bash, Windows, Linux, MacOS, VS Code, AWS, Firebase
Cybersecurity: Reverse Engineering, Malware Analysis, Software Exploitation, ROP (code-reuse attacks)

Experience

Security Research Assistant   Aug 2022 – Present
University of Alabama   *Huntsville, AL*

- **Co-authored** a research paper and submitted a novel exploit to Exploit-DB within a 12-month period
- Worked closely with a professor in the lab to create ROP Rocket and presented it as a **co-speaker** at Defcon 2023 [info: link]
- Developed more than 100 working ROP patterns that can exploit Windows machines along with Process Injection techniques

Mobile Application Developer Intern
UrbanRider   *Hyderabad, India*

- Learned and developed cross-platform applications using Flutter Framework within a week.
- Engineered UrbanRider manager app using Flutter/Dart for Front-end, Firebase for Back-end.
- Maintained the codebase single-handedly while integrating the new features into the app in real-time.

Projects

Geekyboy | Technologies: Java, Android Studio, WordPress, Firebase   Nov 2017 – April 2019

- Tech related Android app (**50k+** Downloads), Website (**100k+** Stats), **150** Rank in Google Play Store.
- Researched and Implemented ASO gaining huge traffic (2k+ downloads/day) with an average **4.7**/5-star.

Decentralized Chat DApp | Technologies: Blockchain/Web3, React.js, gun.js   April 2022

- Built a decentralized chat app that can handle 1000's of mgs/sec, scales around the world with free of cost.
- The data and infrastructure are not controlled by a centralized authority like AWS/Azure/GCP.

Achievements

- Co-speaker at **DEF CON** official talk - 2023
- Won 4th prize in 48-hour WittyFeed coding hackathon

Certifications

AWS Certified Solutions Architect – Associate	Amazon Web Services (AWS)
Responsive Web Design – JavaScript	FreeCodeCamp
Data Structures and Algorithms – Python	NPTEL

Publications

Co-authored 'Advanced ROP Framework' on exploit development techniques, presented at DEF CON 31, 2023. [Paper]