

Dear Jane,

Thank you for agreeing to participate in my MSc dissertation research at University of South Wales, which develops a Python-based anomaly-based intrusion detection system (IDS) for detecting Denial of Service (DoS) attacks using the NSL-KDD dataset. I appreciate your willingness to share your expertise via email, as a Zoom interview wasn't feasible.

### **Purpose of the Study**

This project evaluates my IDS software artefact by gathering general insights from cybersecurity professionals on IDS functionality, usage, importance, risks, and challenges, as well as perspectives on anomaly-based IDS and dataset relevance (e.g., NSL-KDD vs. CICIDS-2017). Your email responses will help contextualize my research and enhance artefact evaluation.

### **Consent Confirmation**

You've received a consent form outlining the study's purpose, anonymity, data use, and storage in a VeraCrypt-encrypted container (as my laptop lacks full-disk

encryption). By responding to this email, please confirm: “I consent to participate in this email interview, understand the terms in the provided consent form, and agree to anonymized use of my responses. Contact me at

[30133368@students.southwales.ac.uk](mailto:30133368@students.southwales.ac.uk) with any questions or to withdraw.

### **Interview Questions**

Below are 12 questions about your general experiences with IDS, designed to take 15–20 minutes to answer. Please reply by 3rd July 2025, numbering your responses 1–12. No company-specific or sensitive information is needed, and responses will be anonymized (e.g., Participant 1) in my dissertation (Appendix X) to comply with GDPR.

- Can you describe your general experience with managing or using intrusion detection systems in a professional cybersecurity environment?

- How are IDS typically deployed in workplace networks to monitor and protect against cyber threats?
- What role do IDS play in the overall cybersecurity strategy of an organization, and how important are they compared to other security tools?
- What are the primary operational challenges you've encountered when using IDS in the workplace, particularly in dynamic or high-traffic networks?
- In your experience, what are the most significant risks associated with relying on IDS for threat detection in professional settings?
- How do false positive alerts from IDS impact security operations, and what strategies have you seen used to manage them effectively?
- How do IDS integrate with other security systems, such as Intrusion Prevention Systems (IPS), Security Information and Event Management (SIEM), or Security Orchestration, Automation, and Response (SOAR)?

platforms, in your workplace experience?

- What factors influence the choice between anomaly-based and signature-based IDS in workplace cybersecurity strategies?
- How do organizations evaluate the effectiveness of IDS in the workplace, and what metrics or criteria are most valued?
- What are your thoughts on the effectiveness of anomaly-based IDS for detecting modern threats, such as Denial of Service attacks, compared to traditional approaches?
- In your experience, how suitable are older datasets like NSL-KDD for developing or evaluating IDS, compared to newer datasets like CICIDS-2017?
- If an anomaly-based IDS for DoS detection achieves high accuracy and a low false positive rate, what considerations would you prioritize for its practical deployment in a workplace setting?

## **Instructions**

- Reply to this email with your answers, numbered 1–12, at your convenience.
- Provide as much detail as you're comfortable with, or skip any questions.
- Avoid personal or company-specific details (e.g., company names, specific systems) to ensure anonymity.
- If you haven't returned the signed consent form, please feel free to attach it or confirm consent in your reply.

## **Data Handling**

Your responses will be stored in a VeraCrypt-encrypted container, accessible only to me (and my supervisor, if required), and deleted after dissertation assessment (September 2025). Anonymized findings will appear in my Discussion and Appendix X, e.g., "Participants noted false positive challenges (Participant 1, Appendix X)." For GDPR rights (e.g., access, deletion), contact me at [30133368@students.southwales.ac.uk](mailto:30133368@students.southwales.ac.uk).

## **Next**

I'll confirm receipt of your responses .Thank you for contributing to my research!

Best regards,

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