

Scoring Rubric (Total: 100 points + 20 bonus points)

Evaluation Criteria	Description	Points
Data Import, Analysis & Visualization	Successfully import audio data and use appropriate visualizations (e.g., time-domain plots, spectrograms, DTMF tone detection) to support analysis.	20
Password Decryption	Accurately decode at least one 11-character password from the DTMF audio signal using signal processing techniques.	30
Secret Message Decryption	Successfully unlock and extract the hidden message from the secret audio file using filtering or other signal processing methods.	40
Diploma in the Fellowship of the Signal	Successfully check the message you decrypted and claim your membership diploma in the Fellowship of the Signal using the <i>Trial mlx</i> script	10
Presentation Quality (Bonus)	Deliver a clear, well-structured, and engaging presentation (in-person or recorded) that demonstrates understanding of the problem, methodology, and results.	+10
Scalability (Bonus)	Develop a scalable solution using MATLAB functions or a Simulink model that can automatically decode passwords from DTMF audio inputs.	+10