Analysis and Design of Advanced Algorithms
Group #607
Team 3
Luis Salomón Flores Ugalde

Miguel Ángel Álvarez Hermida A01722925
Benjamin-Christian Blaga A01830797
Alfredo Luce Morales A01772499

INTEGRATED ACTIVITY - TRANSMISSION ANALYSIS AND MALICIOUS CODE DETECTION

Santiago Quintana Moreno A01571222

This project deepened my understanding of how efficient pattern-matching techniques fundamentally shape algorithmic performance when handling large-scale inputs. Exploring the differences between naive and optimized approaches made me appreciate how selecting the right structure or algorithm can drastically reduce computational overhead. This awareness not only strengthened my analytical mindset but also gave me a clearer perspective on the practical importance of asymptotic behaviour beyond theoretical coursework.

Additionally, transforming theoretical ideas into reliable, well-structured code helped refine my implementation discipline. Debugging and validating each component made me more attentive to edge cases and performance bottlenecks. Overall, this experience reinforced my confidence in applying algorithmic reasoning to real scenarios, bridging classroom concepts with hands-on problem-solving.