

A Reflective Self-Evaluation

This Systems Engineering course has provided a vital framework for contextualizing and expanding upon my professional experience. As a student with a long-standing career in IT infrastructure and systems management, this class has served as a critical bridge between my extensive practical knowledge and the formal, theoretical principles of systems engineering. My engagement with the course material has been consistently driven by a desire to connect these two worlds, and my work is a reflection of that synthesis.

My background as a Senior Systems and Network Engineer and later, as an IT Operations Team Lead at the MoD of RA, provided me with a robust, real-world understanding of complex interdependencies, system lifecycles, and the critical importance of resilience and scalability. However, this experience was often reactive and

and hands-on. This course has equipped me with the philosophical perspective of systems design from a more holistic, architectural approach in my further projects.

This foundation is directly applicable to my current role as a Senior Core Cloud Infrastructure Engineer at Firebird AI. Here, I am constantly engaged in designing, building, and maintaining a highly complex, distributed environment of the largest neocloud in the region (with over 20000 NVIDIA B200 GPUs). The course's exploration of system boundaries, feedback loops, and emergent behavior directly informs my daily challenges in ensuring our cloud infrastructure is not only functional but also efficient, scalable and robust.

I have channeled this real-world connection into my coursework, striving to complete all assignments by delivering what I hope are optimal and creative solutions. I've found particular value in

pushing the boundaries of the assignments to better explore the topics. This commitment was best demonstrated by my projects involving the demoscenes and the Python IDE I designed to deliver them. The other project I am proud of is the OS and computer architecture assignment, as I developed a complete Linux CLI-based presentation software. This was not just an academic exercise but a creative approach to demonstrating the concepts, forcing me to engage with the material at a much deeper, systems-first level.

Building on that, I believe this CLI presentation tool—a piece of software designed to present information about operating systems, while itself being a product of that system's architecture—serves as a practical and tangible example of the "strange loops" concept we have discussed. I would be very interested in delivering a short, extra-credit presentation on this software, detailing its design and connecting its self-referential nature to our class topics.

In conclusion, this course is an invaluable experience. It has formalized many philosophical aspects of systems, encouraged me to think more creatively and abstractly about the technologies I build and manage every day.