

CS 408 — Term-Project Evaluation Rubric

(Drone-Enabled Mobile Edge Computing for Environmental Monitoring)

Criterion	Pts	Excellent (100 %)	Proficient (70 %)	Deficient (≤ 40 %)
1. Core Functionality (live demo)		35 pts		
Multi-sensor TCP connectivity (≥ 3)	12	All links auto-establish; quick recovery shown by disconnecting/reconnecting a sensor.	Links work but need manual restart <i>or</i> recovery imperfect.	Frequent drops; single-sensor only.
Real-time edge processing	10	Rolling stats & anomalies update quickly of data arrival; evaluator can change window live.	Updates delayed or window hard-coded.	Calculations wrong or missing.
Battery depletion + return-to-base scenario	7	Live slider / CLI triggers mode switch; data handled gracefully; status LEDs/UI change.	Mode switch works but causes backlog or unclear UI cue.	Feature absent or crashes.
Sensor loss handling	6	Evaluator unplugs a sensor; system logs & GUI reflect loss; reconnection succeeds.	Loss detected but GUI silent or reconnection flaky.	Ignored or hangs.
2. User Experience (live demo)		30 pts		
Drone GUI clarity & responsiveness	8	Charts/indicators repaint; intuitive layout; battery alert visually distinct.	Updates slowly or minor alignment issues.	Slow/static or cluttered GUI.
Central server visualization	7	Aggregated graphs, anomaly flags, log panel all live; supports pause/zoom.	Basic table only; no anomaly highlight.	Console prints only.

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Interactive controls	5	Evaluator can modify thresholds, start/stop streams, reset stats during demo.	Only start/stop available or input validation weak.	No runtime controls.
Professional look & accessibility	5	Consistent theme, readable fonts, color-blind-safe palette.	Some clashing colors or cramped widgets.	Unreadable or inconsistent style.
Deployment readiness	5	One-command launch (script/Makefile).	Manual virtual-env steps.	Complex setup or repeated restarts needed.
3. Submission Package		35 pts		
Concise design brief (≤ 3 pp)	12	Architecture diagram, module API, and test plan are all present.	One element missing or vague.	Superficial or off-topic.
Code structure & comments	12	PEP-8 compliant, modular, docstrings & README clear.	Mixed styles or sparse comments.	Spaghetti code, missing README.
Logging & reproducible tests	11	Structured logs + script for replaying a sample data file.	Logs present but replay script missing.	No logs or replay facility.
				Total: 100 pts