Noise Injectors

Anonymization & Compliance Certificate

Identified Privacy Risks

- **Minimality Attack:** Over-generalization detected in **14 records**.

- **Attribute Disclosure:** *Occupation* linked to *Sensitive Diseases* in public datasets.

- **Composition Attack:** The External salary dataset enables cross-dataset re-identification.

- **Deterministic Linkage:** Exact Age + Gender + City matches found.

Applied Mitigation Measures

- **Masked Sensitive Values** in partially identifying fields.

- **Aggregated Occupations** into broader professional categories.

- **Synthesized Rare Disease–Occupation Pairs** to break one-to-one mappings.

- **Standardized City Names** for consistency and reduced matching accuracy.

Utility & Compliance

- **Income Statistics Deviation:** ±0.5% — negligible research impact.

- **Legal Alignment:** Certified safe for **controlled research release** under national privacy laws.