

Data Formats

Computing

Which serialisation format to use, and what each trades away.

Common interchange formats and where each belongs.

Format	Shape	Best for
JSON	Text, nested	APIs, config, universal
CSV	Text, flat	Spreadsheets, simple export
YAML	Text, nested	Human-edited config
TOML	Text, flat-ish	Config with clear types
Parquet	Binary, columnar	Analytics at volume
Protobuf	Binary, schema'd	Service-to-service, compact
NDJSON	One JSON per line	Streaming and logs

CSV has no standard for quoting, encoding or types. It works until a field contains a comma, a newline or a leading zero.