Related Work
JumpGate is inspired by lots of recent work:
• Sonata / Marple: Network telemetry query processing using packet processors.
• RMT, SmartNICs, NPUs: Line-rate packet processing hardware in production.
• Unstructured Data Parser: Parse variable length formats in hardware.
• Sparser: Filter (approximately) before you parse.
• Flare: Native compilation from Scala to C.

[Sonata] Gupta et al., “Sonata: query-driven streaming network telemetry” (SIGCOMM ’18)
[RMT] Bosschart et al., “Forwarding metamorphosis: fast programmable match-action processing in hardware” (SIGCOMM 2013)
[SmartNICs] Friesen et al., “Azure Accelerated Networking: SmartNICs in the Public Cloud” (NSDI 2018)
[Sparser] Palkar et al., “Filter before you parse: faster analytics on raw data with sparser” (VLDB 2016)
[Flare] Essertel et al., “Flare: Optimizing Apache Spark for Scale-Up Architectures and Medium-Size Data” (OSDI 2018)