nanonext

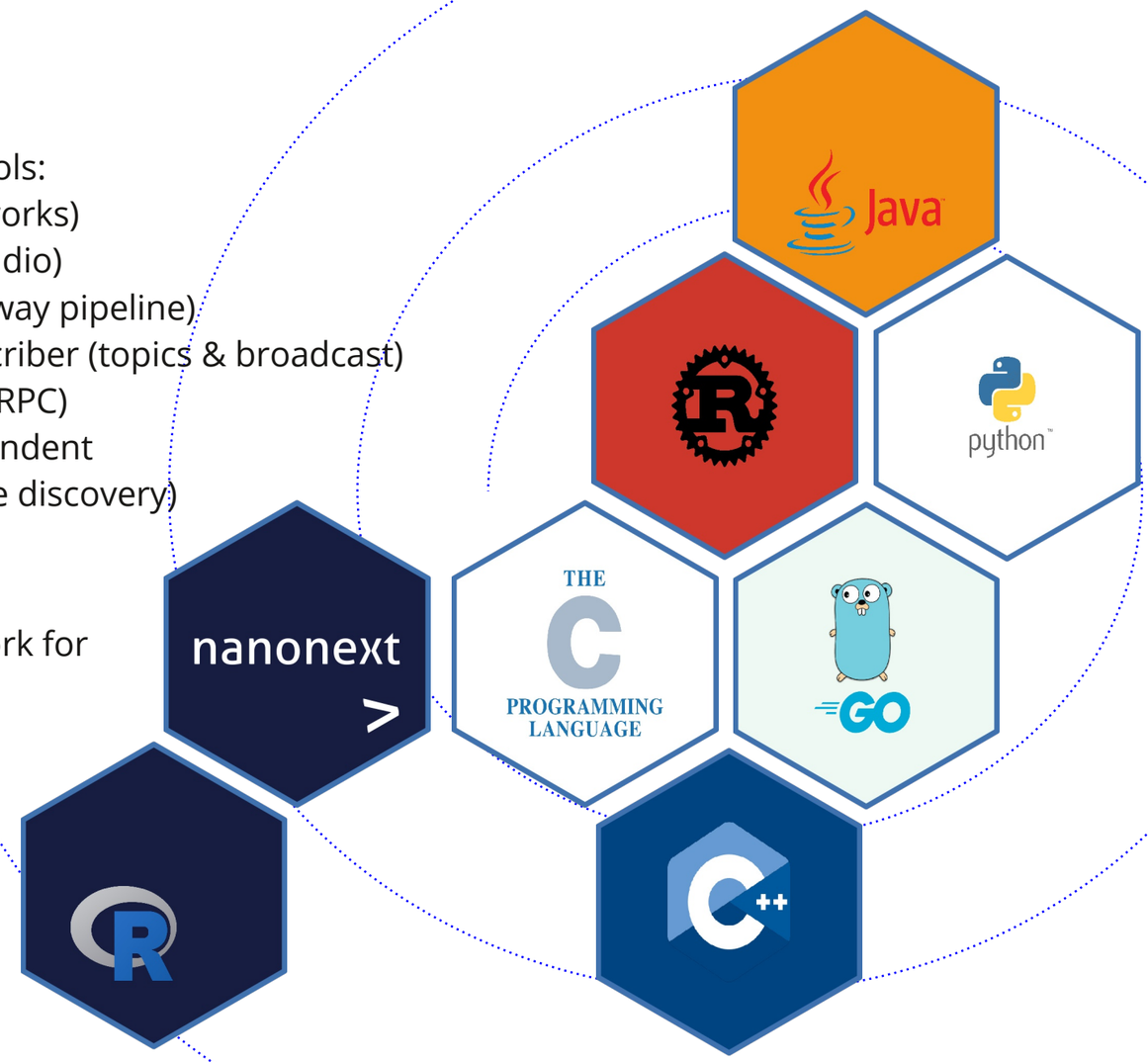
R binding for NNG (Nanomsg Next Generation)

Lightweight C library | Successor to ZeroMQ | Designed for performance & reliability | Zero R package dependency

message-passing

Transports:
» inproc (intra-process)
» IPC (inter-process)
» TCP (IPv4 or IPv6)
» WebSocket

Scalability protocols:
» Bus (mesh networks)
» Pair (two-way radio)
» Push/Pull (one-way pipeline)
» Publisher/Subscriber (topics & broadcast)
» Request/Reply (RPC)
» Surveyor/Respondent
(voting & service discovery)



"receive data generated in Python, perform analysis in R, and send results to a C++ program – all on the same computer or on networks spanning the globe"

concurrency

» Massively-scalable concurrency framework for building distributed applications
» Fully-flexible async send and receive
» 'Aio' objects automatically resolve upon completion of asynchronous operations

web utilities

» ncurl - (async) http(s) client
supports methods incl. POST / PUT, querying REST APIs
» stream - (async) (secure) websocket client +
low-level socket interface to arbitrary sources
» messenger - console-based instant messaging

https://shikokuchuo.net/nanonext
https://cran.r-project.org/package=nanonext

mirai
<>

未来 / みらい / mirai
Japanese for 'future'

Minimalist async evaluation framework for R

» Built on 'nanonext' and 'NNG' technology
» mirai() returns a 'mirai' object immediately
» Evaluates an expression asynchronously, resolving automatically upon completion

https://shikokuchuo.net/mirai
https://cran.r-project.org/package=mirai