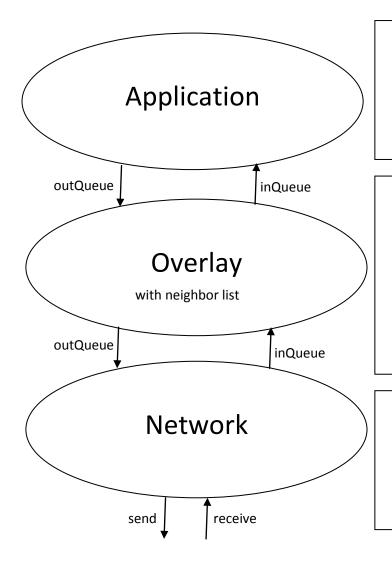
Software Specification "Folder Sync"

3-Layer-Architecture



- periodically sending file list to neighbors
- sending request for file x from neighbor y
- sending file x to neighbor y
- receive ping and react with pong for peer exploration
- build-up connection
- terminate connection
- refresh neighbor list (delete neighbors with expired timeouts)
- analyze messages from application and outreach them to the network
- send messages
- receive messages
- file transfer

Message specification:

```
incoming Ping := ("Ping", PingID, TTL, Hops, senderUsername, senderIP)
outgoing Ping := ("Ping", PingID, TTL, Hops, ownUsername, ownIP, targetIP)
incomingPong := ("Pong", ID, [(Username, IP), (Username2, IP2), ...])
outgoingPong := ("Pong", ID, [(Username, IP), (Username2, IP2), ...], targetIP)
```