

## Summary

A complete architectural framework for humanoid robots designed from first principles, prioritizing biomimetic actuation, federated power distribution, and hardware-first safety. The system treats dexterous manipulation and safe human interaction as fundamental design constraints rather than software-layer afterthoughts.

**Key Innovation:** Replaceable muscle bundle libraries combined with three-tier power federation and reflex-arc safety interrupts that operate independently of central processing.

**Status:** Conceptual architecture with detailed subsystem specifications.

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