White Papers

Technical reports, methodological frameworks, and research workflows

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1.1 Mac Workflow for Tracking Daily Research Progress

A comprehensive framework for organizing research activities, maintaining progress logs, and implementing version control for academic projects.

Research management Workflow automation Version control Academic productivity

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1.2 Setting Up a Comprehensive Research Backup System on macOS

Technical specification for implementing a multi-layered backup strategy for research data, ensuring redundancy and security across local and cloud storage systems.

Data management Backup systems macOS Research infrastructure

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Specification for a domain-specific programming language designed to capture clinical trial database validation logic, with compilation targets for Lua and JavaScript.

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Implementation guide for reproducible R analysis environments using Docker containerization, including best practices for sharing and deployment.

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4.2 AWS Server Configuration for Research Computing

Comprehensive guide for setting up and configuring AWS instances for statistical computing and research data analysis.

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These white papers represent in-depth technical analyses, methodological frameworks, and implementation guides developed for research and statistical computing applications. Each document provides detailed specifications, best practices, and reproducible workflows.