Untitled

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| Method | Approach | Advantages | Limitations |
| mice | Iterative MICE (Multivariate Imputation by Chained Equations) | * Flexible for various data types | - May not capture complex dependencies * Handles complex relationships | - Requires careful specification of methods * Multiple imputation methods | - Convergence criteria | | |
| pan | Pattern-Mixture Modeling | * Focuses on patterns of missingness | - Requires knowledge of patterns | * Pattern-specific imputation models | - Limited to reasonable pattern-specific models | | |
| mi | EM Algorithm (Expectation- Maximization) | * Handles MCAR and MAR mechanisms | - May be more complex to set up | * Joint modeling of observed and missing data | - Computationally demanding for large datasets | | |
| amila | Amputation and Multiple | - Simplifies imputation process | - Imputation quality depends on amputation Imputation | - Works well for certain missing data mechanisms | - May not perform well for all data types | | | |