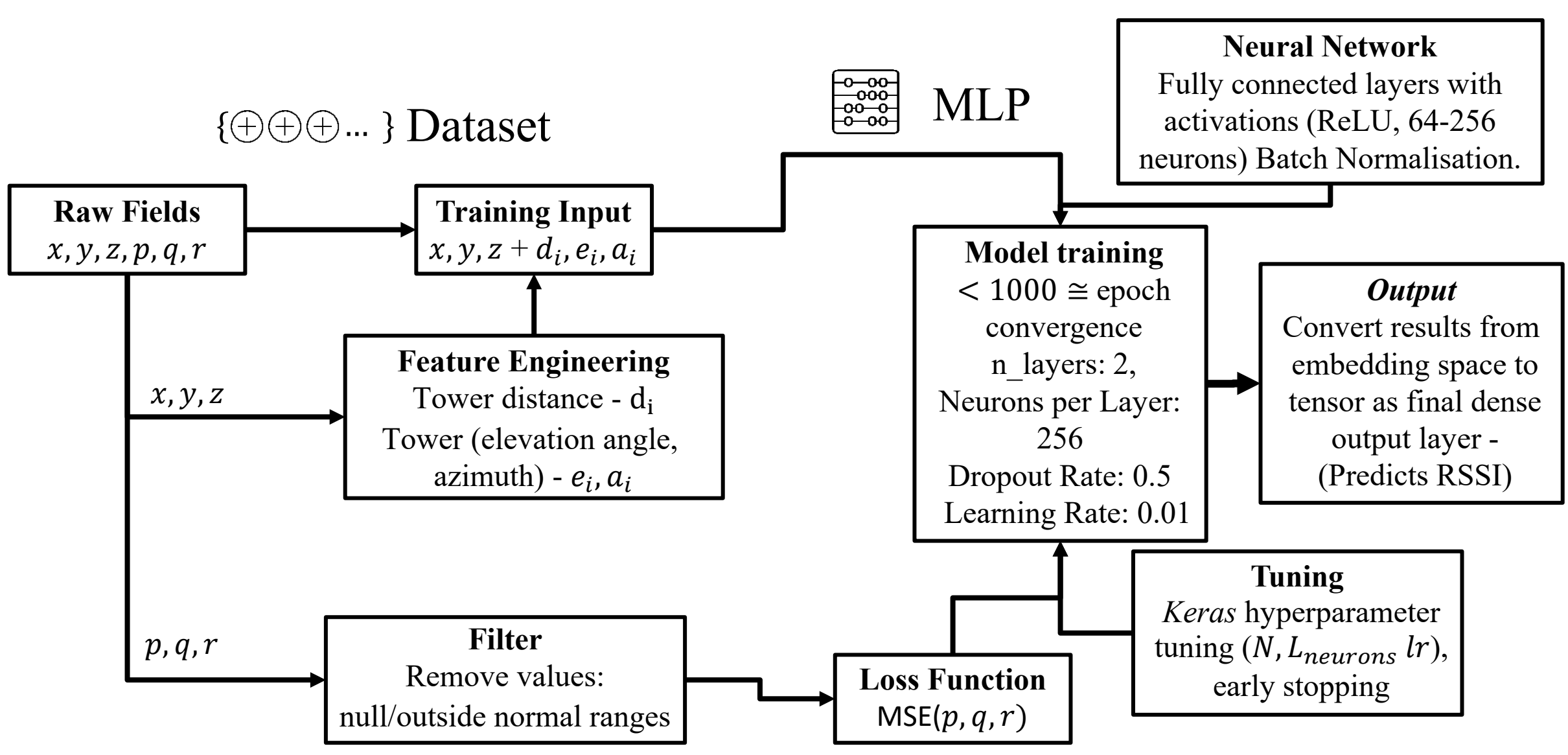
{⊕⊕⊕… } Dataset
MLP
Neural Network
Fully connected layers with activations (ReLU, 64-256 neurons) Batch Normalisation.
Raw Fields
x, y, z, p, q, r
Training Input
$x, y, z + d_i, e_i, a_i$
Feature Engineering
Tower distance - d_i
Tower (elevation angle, azimuth) - e_i, a_i
x, y, z
Model training
$< 1000 \cong$ epoch convergence
n_layers: 2,
Neurons per Layer: 256
Dropout Rate: 0.5
Learning Rate: 0.01
Output
Convert results from embedding space to tensor as final dense output layer - (Predicts RSSI)
p, q, r
Filter
Remove values: null/outside normal ranges
Loss Function
MSE(p, q, r)
Tuning
Keras hyperparameter tuning $(N, L_{neurons}\ lr)$, early stopping