

Prosper_nn
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Version 1.0, October 2023

The package prosper_nn provides four neural network architectures dedicated to time series forecasting, implemented in PyTorch: the Error Correction Neural Network (ECNN), the Historical Consistent Neural Network (HCNN), the Causal-Retro-Causal Neural Network (CRCNN), and the Fuzzy Neural Network. In addition, prosper_nn contains the first sensitivity analysis suitable for RNNs and a heatmap to visualize forecasting uncertainty which was previously only available in Java. These models and methods are used in industry for two decades and were used and referenced in several scientific publications. However, we make them publicly available, allowing researchers and practitioners to benchmark and further develop them. The package is designed to make the models easily accessible, thereby enabling research and application.

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Corporation name: Fraunhofer-Institut für Integrierte Schaltungen IIS

Corporation address: Nordostpark 84
90411 Nürnberg

**Point of Contact /
CLA-Manager:** Ursula Neumann

E-Mail: ursula.neumann@iis.fraunhofer.de

Phone: +49 911 58061 9529

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