

## Neural networks (Project)

### Description

Within our papers: “Forward-looking P”, “Conditional Density Estimation with Neural Networks: Best Practices and Benchmarks” and “Noise Regularization for Conditional Density Estimation.”, we show that a mixture density network with Neural Networks and option implied information is successful in characterizing the density of equity return probabilities. We offer several projects that extend this line of research. Please get in touch if you like to work in that field. Please submit a grade report and CV to [maxim.ulrich@kit.edu](mailto:maxim.ulrich@kit.edu).

### Literature

“Noise Regularization for Conditional Density Estimation.” <https://arxiv.org/abs/1907.08982>

“Conditional Density Estimation with Neural Networks: Best Practices and Benchmarks”  
<https://arxiv.org/abs/1903.00954>

“Forward-looking P” [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3437281](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3437281)

### Contact

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