ZDENEK JUNEK

EXPERIENCE

- **Institute of Information Theory and Automation| Research Assistant| Feb 2021 - Now**

  Focusing on uncertainty representation of machine learning models

- **Faculty of Electrical Engineering CTU | Research Assistant| Oct 2020 - Now**

  Member of Artificial Intelligence Center, focusing on machine learning models for non-standard data structures

- **EY | Client Serving Contractor | Nov 2019 - Now**

  Working on selected projects as self-employed contractor

- **EY | Senior Consultant in Financial Services Advisory | Oct 2017 – Oct 2019**

  Working on advisory projects predominantly for clients from banking or insurance sector, helping mainly with financial risk management (market risk and certain parts of credit risk):
  - Development, implementation and validation of distinct statistical market risk and credit risk models. This includes among others balance sheet forecasting, capital requirements calculations, VaR, pricing, prepayment or default models,
  - Focusing on projects requiring deep knowledge of mathematical or statistical modelling and/or analytical approach,
  - Knowledge of banking sector, processes and products, including financial derivatives and fixed income securities and their valuation techniques,
  - Working for top financial institutions world-wide, including New York, Frankfurt and Milano.

- **EY | Consultant in Financial Services Advisory | Sep 2015 – Sep 2017**

- **Sports team by FNSPE CTU | Non-profit organization representative | Nov 2011 – Dec 2013**
  - Leading sports team with 150 members, company economist. Organization and publicity of a tournament for 500 athletes (May 2012, May 2013, May 2014).

EDUCATION

- **Czech Technical University in Prague| Faculty of Nuclear Sciences and Physical Engineering | PhD Student | Sep 2020 - Now**

  Applied mathematics & artificial intelligence:
  - Focusing on machine learning models for non-standard data structures and their representation of uncertainty

- **Czech Technical University in Prague| Faculty of Nuclear Sciences and Physical Engineering | Ing. (= MSc equivalent) degree | 2010 - 2017**

  Applied mathematics:
  - Basic and intermediate courses covering distinct mathematical fields (including among others numerical mathematics, probability, statistics, differential equations, calculus of variations, physics courses, coding and algorithmic courses),
  - Topics of research: Mathematical finance (with focus on financial derivatives pricing), stochastic analysis, stochastic optimal control.

- **University Denis Diderot (Paris VII) | Mathematical finance | 2014 - 2015**

  Master program Modélisation aléatoire - Master in Finance, Statistics and Probability, based on Erasmus+ program.

SKILLS

- Speaking Czech (native), English (fluent), French (intermediate), German (intermediate] and Italian (basics),
- Computer skills: MS Office, knowledge of R, Python, MATLAB, LaTeX, basics of SQL, C/C++, VBA, Julia
- Driving license: B.