THIBAULT DODY

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Authorized to work in the US without sponsorship.

WORK EXPERIENCE

Principal Engineer at JENSEN HUGHES, Wakefield MA (Jan. 2017 to Present)

- **Software development:** Tool dedicated to processing seismic records (.Net, Git in Agile environment).
- **Software development**: Dedicated to post-processing piping analyses for nuclear power plants (.NET).
- Co-created the Data Automation and Machine Learning team. This small group leverages analytical tools (python, VBA, Access) to improve the efficiency of daily engineering for the rest of the company.
- Developed and maintained our project cost-estimate tool (VBA).
- Wrote python scripts to perform assessment of large 3D finite element models.
- Responsible for the update and maintenance of our internal QA tracking software (.NET and SQL Server).
- Performed work on database-driven projects (Access). These projects help power plants to combine the results of their probability-risk assessments and select equipment requiring maintenance.
- Involved in risk analyses and assessment of plant safety procedures. This work consists of identifying key risk contributors and performed probabilistic assessments. This work was performed for clients in the US, Taiwan, and South Korea.

Senior Engineer at Stevenson & Associates, Woburn MA (June 2013 to Dec. 2016)

- Performed seismic upgrade for a nuclear power plant in Taiwan
- Produced 3D Finite Element modeling of concrete/steel structure for Seismic Probability Risk Assessment

EDUCATION

Massachusetts Institute of Technology – Master of Engineering (2012-2013)

- Candidate for the Master of Engineering in High Performance Structures
- Thesis: "*Damping Optimization Using Transfer Function Criteria*" (using Matlab)

ESTP, Paris France – Bachelor/Master of Sciences in Civil/Structural Engineering (2010-2013)

- Ranked top 2% (220 students)
  - Applied Statistics/Advanced Probability, Integral Calculus/Differential Calculus
  - Advanced Algebra, Numerical Analysis, Numerical Optimization

RELEVANT SKILLS

- Development: .NET, SQL Server, VBA, Git, Tableau
- Python
  - Data: Pandas, Numpy
  - Visualization: matplotlib, Bokeh, seaborn, nxviz, Leaflet
  - Machine learning: scikit-learn
  - Deep learning: Keras, Tensorflow
  - Stats: scipy
  - Others: network, cv2

INDEPENDENT COURSEWORK

- Full list: https://tdody.github.io/Certificates/
- Deep Learning – Deep Learning.ai
- Advanced Machine Learning – Coursera (in progress)
- Statistic with Python – Coursera
- Data Visualization with Tableau – Coursera
- TensorFlow in Practice – Deep Learning.ai

PROJECT & PORTFOLIO

- https://tdody.github.io