THIBAULT DODY

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Authorized to work in the US without sponsorship.

WORK EXPERIENCE

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

- **Software development:** Tool dedicated to processing seismic records and time-histories (.Net, Git in Agile environment).
- **Software development**: Application used to post-processing piping analyses (.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 company-wide project cost-estimate tool (VBA).
- Wrote python scripts to perform automatic assessment of high-resolution 3D finite element models of nuclear power plants.
- 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.
- Managed and performed probabilistic risk analyses and assessment of nuclear plants. This work consists of identifying key risk contributors and performed probabilistic assessments of their failures. 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. Served as lead engineer for this scope.
- Produced high-resolution 3D Finite Element modeling of concrete/steel structure for Seismic and Thermal Probability Risk Assessment.

EDUCATION

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

- Master of Engineering in High Performance Structures, 4.9 GPA
- 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)
- Statistics with Python – Coursera
- Data Visualization with Tableau – Coursera
- TensorFlow in Practice – Deep Learning.ai

PROJECT & PORTFOLIO

- Real Estate
- Seedling Classification
- Titanic
- Image Caption
- Sale Forecast