Gil Forsyth

CONTACT
INFORMATION

E-mail: gil@forsyth.dev

SUMMARY

I work on and with many libraries within the PyData / SciPy ecosystem.

My technical background is in distributed and parallel computing and I apply that skill set to data science and machine learning.

I wear a lot of hats and have been involved in every step of model development from initial data exploration to design and implementation of model training and serving platforms.

PROFESSIONAL
EXPERIENCE

Capital One

Senior Manager, Machine Learning Engineer	**2021 - Present**
Manager, Software Engineer	**2019 - 2021**
Principal Associate, Data Scientist	**2017 - 2019**

Drive adoption of Dask across enterprise
Build and maintain internal machine learning libraries for enterprise
Serve as enterprise-wide intent lead for Python
Subject matter expert for the SciPy stack and distributed computing
Contribute to open source projects (Dask, scikit-learn, XGBoost, xonsh)

SKILLS

- Programming Languages
    - Python, Cython
- Areas of Practice
    - Machine learning, distributed systems, performance and optimization, packaging, version lifecycle management

EDUCATION

George Washington University, Washington, DC

Performed three years of studies in computational fluid dynamics in pursuit of PhD before exiting program

Boston University, Boston, MA

M.S., Mechanical Engineering	**May 2014**

Oberlin College, Oberlin, OH

B.A., History, East Asian Studies, Religion	**May 2006**

CONFERENCE
PRESENTATIONS
AND SERVICE

Scientific Computing with Python (SciPy) Conference

Program Chair	**2017 - 2020**

Tutorials
- Xonsh: Bringing Python Data Science to your Shell @ SciPy 2019
- Python Performance for Poets @ PyCon 2019
- Numba: Tell Those C++ Bullies to Get Lost @ SciPy 2016, SciPy 2017

Presentations
- Universal Scalable Custom Machine Learning Estimators @ GTC 2020
- Python, GPUs and Boundary Elements for Biomolecular Electrostatics @ SciPy 2017

PUBLICATIONS

Papers
- Barba, Lorena, and Gilbert Forsyth. *CFD Python: the 12 steps to Navier-Stokes equations.*, Journal of Open Source Education 2.16 (2018): 21.
- Clementi, Natalia C., et al. *PyGBe-LSPR: Python and GPU Boundary-integral solver for electrostatics.* Journal of Open Source Software 2.19 (2017): 306.
- Cooper, Christopher D., et al. *PyGBe: Python, GPUs and Boundary elements for biomolecular electrostatics.* Journal of Open Source Software 1.4 (2016): 43.