

Gil Forsyth

CONTACT INFORMATION

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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)

SKILLS

- Programming Languages
 - Python, Cython, C
- Areas of Practice
 - Machine learning, distributed systems, performance and optimization

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.