Gil Forsyth

Contact Information

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Summary

Scientific software developer with a background in high-performance computing and computational performance. Software engineer, data scientist, open source maintainer and contributor, fond of numerical linear algebra. Experienced public speaker. Pythonista.

Professional Experience

Voltron Data

- ➢ Senior Staff Software Engineer — **2024 - Present**
- ➢ Staff Software Engineer — **2021 - 2024**

Capital One

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

Skills

Python, SQL, Substrait, machine learning, distributed systems, performance and optimization, packaging, version lifecycle management

Open Source Projects

Ibis Project (https://ibis-project.org)

- ➢ Steering Council Member — **September 2023 - Present**
- ➢ Committer — **March 2022 - September 2023**

Substrait (https://substrait.io)

- ➢ Committer — **November 2022 - Present**

χ**onsh** (https://xon.sh)

- ➢ Core Maintainer — **March 2018 - Present**
- ➢ Maintainer — **January 2015 - March 2018**

Conference Presentations and Service

Scientific Computing with Python (SciPy) Conference

- ➢ Program Chair — **2017 - 2020**

Tutorials

- ➢ Introduction to Ibis: blazing fast analytics with DuckDB, Polars, Snowflake, and more, from the comfort of your Python repl @ PyCon 2024
- ➢ Ibis: A fast, flexible, and portable tool for data analytics @ PyData 2023
- ➢ Ibis: A fast, flexible, and portable tool for data analytics @ EuroSciPy 2023
- ➢ 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

- ➢ Ibis: Because SQL is everywhere and so is Python @ SciPy 2024
- ➢ Ibis: Because SQL is everywhere but you don't want to use it @ PyData Seattle 2023
- ➢ Ibis: Expressive Analytics in Python at any scale @ PyData NYC 2022
- ➢ Universal Scalable Custom Machine Learning Estimators @ GTC 2020
- ➢ Python, GPUs and Boundary Elements for Biomolecular Electrostatics @ SciPy 2017

Education

George Washington University, Washington, DC

Performed three years of studies in computational fluid dynamics in pursuit of PhD **May 2017**

Boston University, Boston, MA

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

Oberlin College, Oberlin, OH

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

Publications

- 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.