

# Gil Forsyth

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## 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.

I spend most of my time working on Ibis (<https://ibis-project.org/>)

## 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**

## 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**

## CONFERENCE PRESENTATIONS AND SERVICE

### **Scientific Computing with Python (SciPy) Conference**

- Program Chair **2017 - 2020**

### **Tutorials**

- 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 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](#)

## 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.

## OPEN SOURCE PROJECTS

### **Ibis Project** (<https://ibis-project.org>)

- Steering Council Member
- Committer

**September 2023 - Present**  
**March 2022 - September 2023**

### **Substrait** (<https://substrait.io>)

- Committer

**November 2022 - Present**

### **χonsh** (<https://xon.sh>)

- Core Maintainer
- Maintainer

**March 2018 - Present**  
**January 2015 - March 2018**