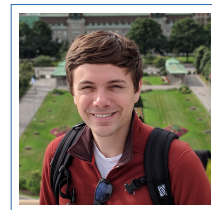


C. David Sanders

Software Engineer

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📍 davesque



Education & Coursework

- 2014–Present **Deep Learning Coursework**, Coursera, Online.
Deep Learning Specialization (Andrew Ng), Machine Learning (Andrew Ng).
- 2013–2017 **Engineering Coursework**, University of Colorado, Boulder, CO.
Calculus 2 & 3, Data Structures, Computer Systems, Linear Algebra, Discrete Mathematics, Algorithms, Principles of Programming Languages. 3.88 GPA.
- 2005–2009 **Bachelor of Arts**, University of Colorado, Boulder, CO.
Dean's list 7 out of 8 semesters. 3.78 GPA.

Skills

- Languages *In order of familiarity*: Python, Rust, C++, Javascript, SQL, Scala, Haskell, Java, Go
- Libraries Dask, Arrow, NumPy, Pandas, Django, Django REST Framework
- Misc. Tech. Vim, Bash, Tmux, Git, Docker, Kubernetes, Linux
- Misc. Skills Blockchain & Machine Learning

Open Source Projects & Contributions

- Fe (founder) Pythonic, security focused smart contract language for the Ethereum blockchain.
- Simple JWT (founder) A JSON Web Token authentication plugin for the Django REST Framework.
- eth-abi (contributor) Low-level encoding library for the Ethereum blockchain.
- web3.py (contributor) RPC library for interacting with Ethereum clients.

Experience

- Jan 2020–Present **AI Tech Lead**, *Unsupervised*, Boulder, CO.
Responsible for driving development and maintenance of all internal distributed compute frameworks and libraries. This includes heavy customizations of Dask to leverage Arrow as an internal data representation as well as custom compute kernels over Arrow arrays written with Cython and C++.
- Mar 2018–Jan 2020 **Senior Software Engineer & OSS Maintainer**, *Ethereum Foundation*, Remote.
Founder and principal maintainer of the Rust Vyper (now called Fe) compiler. Also part of “Snake Charmers” team within the Ethereum Foundation which was focused on development of Python tools and maintenance of open source Python projects. The Snake Charmers also collaborated with Foundation research teams to implement next generation protocol and smart contract research. This included work on the open source Python Ethereum client, Trinity, web3.py, and related libraries.
- Nov 2013–Mar 2018 **Senior Software Developer**, *Specialized Bicycle Components (Retül)*, Boulder, CO.
Developed REST API services for data collection from digital measurement devices. Services written in Python (Django Framework) and deployed with Docker on Heroku. Some services also deployed to cloud-hosted Linux VPS (configuration managed with Salt Stack). Used NumPy and Pandas libraries to implement proprietary search and data analysis routines. Administered all Retül department web services. Developed pressure point detection algorithm for pressure reading device. Built continuous integration pipeline using Docker and CircleCI. Researched deep learning techniques and possible applications. Mentored junior devs and conducted code review.

Interests

- Technical Deep Learning & Machine Learning, Blockchain & Distributed Tech, Mathematics, Programming Language Design & Theory
- Musical Classical & Folk Guitar, Indian Classical Tabla
- Linguistic Japanese (elementary proficiency)