Jack Wardell

Data Engineer / Software Engineer

CV @ https://www.jackwardell.co.uk

Profile

ONE-LINER

I am a resourceful and enthusiastic software developer who genuinely enjoys learning and building, and am motivated by an innate curiosity and a desire to master my technologies.

SUMMARY

- Python developer and software engineer - specialising in data engineering (e.g. Pandas, Numpy, Sklearn) and full stack web development (e.g. Flask, Bootstrap4, SQLAlchemy, Postgres)
- Open source developer: packages on pip, numerous projects and repos on GitHub and contributions to open source libraries like Flask (https://github.com/jackwardell)
- Lots of experience in data ingestion (e.g. scraping, REST APIs, etc), mission-critical applications, TDD, end-to-end testing (e.g. Selenium), CI/CD and microservices
- Extensive knowledge of agile frameworks (e.g. Kanban, Scrum, XP), the lean startup approach, OKRs, DevOps & mutual learning
- Hands on experience with business oriented technologies: Azure, AWS, Tableau, PowerBI, Alteryx, Streamsets, Heroku, etc
- Values: simplicity, courage, respect, compassion, curiosity, transparency, customer collaboration, feedback & adapting to change

LOOKING FOR

- Building software mainly in Python
- Being able to deliver value to the customer and business
- A highly collaborative, cross-functional agile team
- A non-hierarchical and psychologically safe working environment

---

Employment History

AI ENGINEER AT SHELL: *Dec 2019 - Present, London*

- Role: Promotion from previous role after extensive training in machine learning (e.g. Udacity), in the same team
- Delivered:
  - Ad-hoc model creation and model deployment on Azure
  - Feature selection and hyperparameter tuning in kubernetes
  - A self-service Flask webapp that allows users to build machine learning models with a UI
  - Migration of monolithic codebase to microservices in kubernetes

DATA ENGINEER AT SHELL: *June 2018 - Dec 2019, London*

- Role: On-site consultant data engineer in ScrumBan agile team, using lean start-up approach with weekly customer collaboration
- Business Aim: To optimise internal customer decision making by applying machine learning to various discrete signals from multiple sources
- Delivered:
  - Version control & CI/CD pipeline
  - Data ingestion from multiple sources, processing & storage
  - A machine learning pipeline
  - A mission-critical advanced web application
- Stack: Python, Flask, SQLAlchemy, Pandas, Numpy, Sklearn, Git, Docker, Jenkins, Azure, Postgres, Redis, Blob, HTML, CSS,

Jinja2, Javascript, JQuery, Bootstrap4, Kubernetes, Celery, Scrum, Kanban, Lean Startup, Mutual Learning, Jira, Slack, ACT, RFT

- Internally awarded prizes within Shell: Code Masters Award, Downstream Directors Award, Increasing Profitability In The Base Business Award

BIG DATA ENGINEER AT KUBRICK GROUP: *Feb 2018 - Present, London*

- Role: Rigorously trained on-site in the discipline of big data engineering, learning technical, business and soft skills
- Stack: Python, SQL (T-SQL, Microsoft SQL Server), NoSQL (MongoDB), Spark (Hadoop, Hive), Excel

---

Education

CHEMISTRY MSCI AT UCL: *London*

- 3rd Year dissertation on 'Structural Defects in Metal–Organic Frameworks' under Prof. Ben Slater
- 4th Year advanced chemical project on 'Synthesis and Study of Exotic Magnets – Engineering New Quantum States' under Prof. Andrew Wills
- Overall grade: 2.1

ABINGDON SCHOOL: *Oxford*

- A-levels: Chemistry A*, Maths A*, Further Maths B, Art A
- GCSEs: 11 A* - A

Skills

KEY SKILLS:

- Data engineering: data ingestion, data pipelines, AI/ML engineering, data analysis, data modelling & machine learning
- Software engineering: full stack development (back end & frond end engineering), TDD, SOLID, APIs & design
- Agile & other methodologies: Scrum, Kanban, Lean, XP, OKRs, mutual learning, DevOps
- Other: chemistry, public speaking, trading, cryptos

LANGUAGES, FRAMEWORKS, LIBRARIES & TECHNOLOGIES:

- Python, SQL, HTML, CSS, Javascript, Flask, JQuery, Bootstrap4, Jinja2, Pandas, Numpy, Scikit-learn, SQLAlchemy, Postgres, Docker, Git, Click

---

Personal

ANTIPODE COEFFICENT:

- Built a website to calculate the antipode coefficient between two points. The basic idea is that two points can be described with a number between 0 and 1, where 1 represents a place being perfectly opposite on the globe (https://www.antipodecoefficient.com/)
- Stack: Flask, SQLAlchemy, Alembic, PostgreSQL, Heroku, Mapbox, GeoPy, GeoJSON, Gunicorn, Click, Bootstrap4, pytest, TDD, GitHub, JQuery

UDACITY COURSE ON MACHINE LEARNING:

- Completed multiple projects on supervised and unsupervised learning, with sklearn and pytorch
- Stack: Ensemble models, Bayesian models, SVMs, Image classifiers, PCA, scikit-learn, pytorch, matplotlib, seaborn, pandas, numpy

OPEN SOURCE CONTRIBUTOR:

- A few packages on pip, contributions to Flask, many repos and projects on GitHub (https://github.com/jackwardell)

GARDENING, BOTANY, HORTICULTURE & BONSAI:

- I enjoy growing plants and identifying trees. This summer I have been potting up saplings in preparation for bonsai