# David Vaillant

## Experience

2021–Present **Data Analyst**, *X (via ERGInc)*, Mountain View.

Answered business questions with a combination of Pandas, SQL, and stubbornness.

- Created ETL pipelines between our inventory management system, existing device information, and Salesforce.
- o Worked with hardware team to design and run temperature validation processes. Transitioned process from manual work done via Mathematica to an automated Python script that uploads results directly to a BigQuery database.
- o Architected and implemented an Experiment API to simplify and unify operational and data analysis processes.

#### 2019–2021 **Software Quality Specialist**, Waymo (via Crowdstaffing), Mountain View.

Analyzed instances of misbehavior by self-driving vehicles and applied root cause analysis to determine the specific software system responsible.

- Streamlined the software fault analysis workflow using SQL-driven dashboards.
- Implemented productivity-saving features for proprietary applications.
- o Designed and managed the rollout of new workflows across multiple teams.

### 2017–2018 Mathematics Tutor, West Valley College, Saratoga.

Tutored disadvantaged students in algebra, statistics, and fundamental concepts in mathematics.

#### 2015–2016 **Technical Intern**, Desert Farms Camel Milk, Santa Monica.

Provided technical support for an online small business.

- Saved hours of manual labor by programmatically querying and organizing customer orders using Ruby scripting.
- o Improved the performance and responsivity of the online storefront, increasing customer satisfaction and retention.

#### Education

2010–2014 **BSc. Mathematics**, University of California, Santa Barbara.

Studied combinatorics, graph theory, linear algebra, and the foundations of statistics.

#### BA. Philosophy.

Specialization in logic and the philosophy of mathematics.

### **Proficiencies**

OS Windows, Linux, FreeBSD

**Languages** Python, SQL,  $\protect\operatorname{PTEX}$ , C++

Tools bash, git, GCP (Cloud Run, Composer, BigQuery, Spanner), Salesforce