

# Jesse Windle

Principal Data Scientist

Prairie Village, KS

Website: <https://windle.cv>

LinkedIn: <https://www.linkedin.com/in/jesse-windle-19802836/>

GitHub: <https://github.com/jwindle>

PhD applied mathematician-turned-statistician with coding chops that has 11+ years of experience building end-to-end systems and communicating results at a high level.

## EXPERIENCE

---

### **DYDX Capital**

#### **Chief Data Scientist**

December 2024 – Present

Driving data-driven deal sourcing and investment prioritization by leveraging advanced data science and analytics to identify, evaluate, and prioritize high-potential startup opportunities.

- Built a data management system for tracking startups and founders
- Designed and deployed a multi-stage startup prioritization pipeline combining rules-based filters, agent-based reasoning, and NLP-driven prediction models

### **Consultant**

October 2023 – December 2024

Early technical validation for DYDX Capital

- Validated feasibility of data-driven deal sourcing approach

### **Hi Fidelity Genetics / Technologies**

#### **Director of Data Science | Employee No. 1**

May 2015 – March 2023

Built out and led the entire team, including engineering, systems, and data science.

- Raised \$2M+ in non-dilutive funding (ARPA-E, SBIR)
- Built the company's entire data science and analytical infrastructure from scratch
- Conceived and co-invented a device for in-field root growth measurement
- Developed data systems to manage large-scale plant phenotyping experiments
- Developed a novel 3D root growth modeling framework

**Duke University****Visiting Assistant Professor**

July 2014 – May 2015

Taught introductory statistics and conducted research in Bayesian statistics

**EDUCATION**

---

**Duke University**

Postdoc in Statistical Science

July 2013 – July 2014

**University of Texas at Austin**

PhD in Computational and Applied Mathematics

July 2005 – May 2013

**University of Nebraska - Lincoln**

BS in Mathematics

July 2000 – May 2005

**SKILLS**

---

**Statistics and machine learning**

regression and classification, clustering and dimensionality reduction, hypothesis testing, variable selection, state-space models, Bayesian inference, neural networks, tree-based methods like random forests and gradient boosting, Gaussian processes

**Statistics and machine learning tools**

Python, Numpy, Pandas, Scikit-learn, Statsmodels, PyTorch, Lightning, JAX/Flax, R, Stan, Pyro

**Systems tools**

SQL, MongoDB, FastAPI, SQLAlchemy, Next.js, Prisma, Git, Docker / Podman, AWS, Linux

**PUBLICATIONS**

---

**Capturing in-field root system dynamics with RootTracker**

J.J. Aguilar, M. Moore, L. Johnson, R.F. Greenhut, E. Rogers, D. Walker, F. O'Neil, J.L. Edwards, J. Thystrup, S. Farrow, J. Windle, P.N. Benfey. *Plant Physiology*, 187(3):1117–1130

October 2021

**A tractable state-space model for symmetric positive-definite matrices**

J. Windle and C. Carvalho. *Bayesian Analysis*, 9(4):759–792

November 2014

**The Bayesian Bridge**

N. Polson, J.G. Scott, and J. Windle. Journal of the Royal Statistical Society Series B,  
76(4):713–733

August 2014

**Bayesian Inference for Logistic Models Using Polya–Gamma Latent Variables**

N. Polson, J.G. Scott, and J. Windle. Journal of the American Statistical Association,  
108(504):1339–1349

November 2013