John **Randolph**

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Experience

Meta
New York, NY

Software Engineer, Facebook Integrity – PHP, iOS, Android, React, C — *August 2022 - Now*

- Lead engineer for Facebook **Community Notes**; architected consensus algorithm and led design; managed other Eng
- Contributing engineer to Meta **Family Center**, connecting millions of teen and parent accounts
- Owner of **misinformation guardrails** and youth time controls on Facebook
- Contributor to Facebook **emergency integrity responses**, e.g. Israel/Palestine terrorism; U.S. Election

Avalanche Insights (Intern)
Providence, RI

Client Engagement Team — *Fall 2021*

- Analyzed free-response language data to gauge views of US voters

Meta (Intern x3)
New York, NY / Seattle, WA

Artificial Intelligence Applied Research – Python — *Summer 2021*
Natural Language Understanding Team – Python, SQL — *Summer 2020*
Monthly Billing Team – PHP, JavaScript — *Summer 2019*

- Helped develop machine learning model for abstractive document summarization
- Implemented pipeline for programmatic data labeling

BlueBonnet Data (Fellow)
Memphis, TN

Data Fellow - Python, VAN — *Fall 2020*

- Built pipeline with interactive interface to track real-time voting data for U.S. Senate campaign

The Policy Lab @ Brown (Intern)
Providence, RI

Data Scientist Intern – R — *Spring 2019*

- Targeted traffic violation payments in New Orleans; redesigned Rhode Island DMV forms for compliance

Education

Brown University
Providence, RI

B.S., Applied Math; Computer Science; Behavioral Decision Sciences — *September 2017 - May 2022*

- GPA: 4.0 / 4.0
- Phi Beta Kappa, Sigma Xi, Magna Cum Laude, Honors, National Merit Winner

Projects

bias.bet
2,000+ users

Assessment for risk aversion — *February 2025*

- User assessment for classic economic biases (risk aversion, risk seeking, decreasing marginal utility)
- Live at **bias.bet**

Banzhaf Power in Hierarchical Voting Games
2 citations

AAMAS (International Conference on Autonomous Agents and Multiagent Systems) 2024 — *May 2024*

- First author on paper introducing a novel generalization of BPI which provides exponential computational savings to standard BPI
- BPI is a method of measuring the power of voters in voting games, e.g. the US electoral college or ensemble machine learning models
- As a sample application, we apply our algorithm to sentiment analysis in sentences
- Paper is accessible at **ArXiv.org**

Bradshaw turnout tracker
1,500+ precincts

Live election forecasting — *November 2020*

- Turnout tracker for the 2020 Tennessee Senate election
- Takes live data from volunteers at precincts across the state + historical county turnout data to predict the result
- Calculated race results within 1 point faster than any news station called the race