

William E. Bunting

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Professional Experience

Stripe: Software Engineer: Technical Lead

2021-present

- Managed team building out our internal data infrastructure for queries / metrics
- Revamped the internal company metrics reporting application with improvements to alerting, discoverability, search and design.

Stripe: Data Science Engineer

2018-2021

- Served as security lead for the Data Science team achieved a 95% security grade at year end (one of the top teams).
- Developed end-to-end internal data tool that serves all internal analytical query traffic (around 70% of employees are weekly active users).
- Built a dashboarding / visualization tool (akin to Apache Superset) to allow employees to explore and present analytical data
- Built and managed many Spark / Scalding data pipelines
- Built and maintained the core company reporting service which allows leaders to track their metrics and goals

Stripe: Data Scientist

2016-2018

- Initiated many Data science partnerships with Sales, Marketing, and Product teams
- Built and productionized the model used to forecast Sales deal volume

Education

University of Maryland: Ph.D. Physics (ABD)

2015-2016

California Institute of Technology: B.S. Physics and Economics

2011-2015

Projects

ModelingCovid.com: Project Lead

2020

- Built / productionized a [model](#) in Mathematica to estimate effects of social distancing on virus spread. Results informed California government policy decisions in early pandemic.

Skills

Programming Languages: Scala, Typescript, Golang, Java, Mathematica, Python, Bash and more.

Technologies: Hadoop, Spark, Scalding, Kubernetes, Docker, Airflow, React

Publications

- [1] William Bunting, Zicao Fu, and Donald Marolf. “A coarse-grained generalized second law for holographic conformal field theories”. In: *Classical and Quantum Gravity* 33.5 (Feb. 2016), p. 055008. DOI: [10.1088/0264-9381/33/5/055008](https://doi.org/10.1088/0264-9381/33/5/055008). URL: <https://doi.org/10.1088/0264-9381/33/5/055008>.
- [2] William E Bunting and Carlo Rovelli. “Propagator with positive cosmological constant in the 3D Euclidean quantum gravity toy model”. In: *Classical and Quantum Gravity* 31.15 (July 2014), p. 155011. DOI: [10.1088/0264-9381/31/15/155011](https://doi.org/10.1088/0264-9381/31/15/155011). URL: <https://doi.org/10.1088/0264-9381/31/15/155011>.
- [3] William E. Bunting and James C. Ellenbogen. “Linear quantum capacitance scaling for lanthanide and actinide atoms: Analysis of two differing sets of electron-affinity predictions”. In: *Phys. Rev. A* 85 (6 June 2012), p. 062503. DOI: [10.1103/PhysRevA.85.062503](https://link.aps.org/doi/10.1103/PhysRevA.85.062503). URL: <https://link.aps.org/doi/10.1103/PhysRevA.85.062503>.
- [4] Greyson R. Lewis, William E. Bunting, and Brett I. Dunlap. “Smooth scaling of valence electronic properties in fullerenes: From one carbon atom, to C₆₀, to graphene”. In: *Phys. Rev. A* 87 (5 May 2013), p. 052515. DOI: [10.1103/PhysRevA.87.052515](https://link.aps.org/doi/10.1103/PhysRevA.87.052515). URL: <https://link.aps.org/doi/10.1103/PhysRevA.87.052515>.