

Implementations of Probability Theory

Independent Study Appendix and Timesheet
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Week	Date	Type	Duration (Hours)	Description
1	08/30	Advising Meetings	2	Stat Review Content acknowledgement, Latex overview for reports
1	08/26-08/30	Research	8	Subjective Probabilistic Models in The Scout Mindset
2	09/02	Reporting	3	First applications of Latex for final report, created Timesheet System.
2	09/02	Research	2.5	Stat Review: Sample Space through Probability Density Functions
2	09/06	Advising Meetings	1	Research Review and exploration of PDF expected values and confidence intervals
3	09/14	Research	3	Reading: Fooled by Randomness by Nassim N. Taleb
4	09/19	Research	2	Producing Confidence Intervals
4	09/20	Research	1.5	Statistical Inference and t-testing
4	09/20	Advising Meetings	1	Stat Review finalization, definition of reporting standard
5	09/23	Research	2.5	Parametric and Non-parametric tests
5	09/26	Research	3	Kinsman's suggested reading: Prob and Stat by Charles Linn
6	09/25 - 09/30	Research	5	Reading: Fooled by Randomness by Nassim N. Taleb
6	10/03	Reporting	4	Structuring stat review writeup
6	10/04	Reporting	2	Confidence Statistics writeup
6	10/04	Research	2.5	Ludic Fallacy Reading: Skin in the Game by Nassim N. Taleb
6	10/04	Advising Meetings	1	Report review and discussion on replacing deliverables
6	10/05	Application	1.5	Hexagonal basis vectors
7	10/08	Research	2	The Black Swan by Nassim Taleb
7	10/10	Reporting	2	Epistemology Writeup
7	10/10	Research	1.5	The Lindy Effect: The Lindy Way of Living - NYT
7	10/11	Reporting	3	Moral Hazards, Outsized Impact, Lindy Effect in writeup
7	10/11	Advising Meetings	1	Epistemology and Overview discussion, hex mapping
8	10/15	Research	3	Bayes Belief Networks
8	10/16	Application	2.5	Bayes visualizations and practice worksheets
8	10/16	Reporting	2	Early Bayesian Statistics Report
8	10/17	Application	2	Bayes Geometric Visualization

8	10/18	Application	2	Bayes Belief Network Visualization and reporting
8	10/18	Advising Meetings	1	Bayes Report Review
8	10/18	Reporting	2.5	Applying meeting feedback
9	10/22	Research	2	Dempster-Shafer Theory
9	10/25	Advising Meetings	0.5	'are you doing things' check
9	10/26	Research	1	First Pass Markov Chains
10	10/28	Reporting	3	Finalization, added Standard Error, Dempster-Shafer Theory, Fooled by Randomness
10	10/29	Reporting	1	Lindy, Info Gap tie ins
10	10/29	Research	3	Markov Chains (brilliant.org, towardsdatascience)
10	10/29	Reporting	2	Markov Chain Summary
10	10/31	Application	2	Markov Chain examples and Visuals
10	10/31	Advising Meetings	1	Remote Advising
10	10/31	Application	4	Cost-Benefit Analysis of Remote Education
11	11/5	Research	2	Hidden Markov Models
11	11/6	Research	2	Viterbi Algorithm
11	11/8	Advising Meetings	1.5	Practicality of Hidden Markov, Viterbi Discussion
12	11/10	Research	2.5	Struggling with Viterbi
12	11/11	Research	3	Skin in the Game - Renormalization and Minority Rule
12	11/12	Application	2	HMM Applications Overviews
12	11/14	Research	2	Re-learning Viterbi with LLM assistance
12	11/14	Reporting	1.5	Contrasting Viterbi to exponential blowup
12	11/15	Reporting	3	Viterbi graphics
12	11/15	Reporting	1	Renormalization and Minority Rule Reporting
12	11/16	Reporting	2	applying post-wandering mental feedback
13	11/18	Research	3	Monte Carlo Simulations
13	11/19	Reporting	1	Retrospective Discussion
13	11/19	Reporting	2	Monte Carlo Simulations, Buffon's Needle
13	11/21	Research	1.5	Skin in the Game - Fragile System Risk Aversion
13	11/21	Research	5	Understanding MCMC. So not worth it.
13	11/21	Reporting	2	MCMC writeup
13	11/22	Advising Meetings	1	Virtual Review of Research
14	11/26-11/30	Research	4.5	The Signal and the Noise - Nate Silver

15	12/3	Advising Meetings	1	Impromptu Discussion
15	12/5	Reporting	2	Scale as Dimension, Methodology Considerations
15	12/5	Application	1.5	Scale as Dimension and Moore's Law calculation (hugggeee numbers)
15	12/6	Advising Meetings	1	Report Submission Discussion and Future Application
15	12/6	Reporting	3	Pre-Finals Report finalization for semester submission

Hours for Advising Meetings: 13.0

Hours for Application: 17.5

Hours for Reporting: 42.0

Hours for Research: 68.0

Total Hours: 140.5