IMPORTANT: HOW TO READ THE COURSE REVIEWS

Each table below contains 4 rows. The first 3 rows show averages across the University, College, and Department, respectively. Only the final row of each table shows the results for my course.

-Peter Washington

UNIVERSITY of HAWAI'I®
Course Evaluation System

Instructor: Peter Washington
Campus: University of Hawaii at Manoa
Department: Information& Computer Sciences

Semester: Fall 2022
Course: ICS691D Crn (Section): 79929 (001)
Enrollment: 22

1. Global appraisal: Overall how would you rate this INSTRUCTOR?

	Mean	N-Size	Std Dev		Very Poor	Poor	Average	Good	Very Good
University of Hawaii at Manoa	4.2	2217	1.09	Freq(%)	73 (3%)	112 (5%)	261 (12%)	576 (26%)	1184 (53%)
College of Natural Sciences	3.92	873	1.2	Freq(%)	49 (6%)	71 (8%)	132 (15%)	257 (29%)	361 (41%)
Information& Computer Sciences	3.92	873	1.2	Freq(%)	49 (6%)	71 (8%)	132 (15%)	257 (29%)	361 (41%)
CRN (sec) 79929 (001)	4.95	21	0.22	Freq(%)	0 (0%)	0 (0%)	0 (0%)	1 (5%)	20 (95%)

2. Considering everything, how would you rate the GA/TA's sections of this COURSE?

	Mean	N-Size	Std Dev		Very Poor	Poor	Average	Good	Excellent
University of Hawaii at Manoa	4.0	873	1.12	Freq(%)	27 (3%)	37 (4%)	179 (21%)	247 (28%)	374 (43%)
College of Natural Sciences	4.0	873	1.12	Freq(%)	27 (3%)	37 (4%)	179 (21%)	247 (28%)	374 (43%)
Information& Computer Sciences	4.0	873	1.12	Freq(%)	27 (3%)	37 (4%)	179 (21%)	247 (28%)	374 (43%)
CRN (sec) 79929 (001)	4.68	19	0.75	Freq(%)	0 (0%)	0 (0%)	3 (16%)	0 (0%)	16 (84%)

3. Considering everything, how would you rate the LAB for this course?

	Mean	N-Size	Std Dev		Very Poor	Poor	Average	Good	Excellent
University of Hawaii at Manoa	3.85	995	1.17	Freq(%)	37 (4%)	59 (6%)	229 (23%)	294 (30%)	362 (36%)
College of Natural Sciences	3.8	873	1.18	Freq(%)	36 (4%)	56 (6%)	211 (24%)	252 (29%)	306 (35%)
Information& Computer Sciences	3.8	873	1.18	Freq(%)	36 (4%)	56 (6%)	211 (24%)	252 (29%)	306 (35%)
CRN (sec) 79929 (001)	4.74	19	0.65	Freq(%)	0 (0%)	0 (0%)	2 (11%)	1 (5%)	16 (84%)

4. What did you find most valuable and helpful about the instructor?
Provided a brief introduction to each topic within AI, ML, and DL
I found his knowledge on machine learning to be very useful.
The diversity of topics covered in the class was broad, and this is exactly what I have wanted to be exposed to. The reading materials and the discussions in wide range of ML subfields were very helpful in helping me gain breadth of the ML.
Encourage students to give presentations and exploit specific topics.
1. Dr. Washington's lectures are very clear, concise, helpful, and very interesting 2. His structure of the course is organized, efficient, and meaningful. I really learned significantly from having done all the article reflection papers he assigned. In particular, "machine learning" is new to me, so the articles that discuss and elaborate on this topic were invaluable. 3. Dr. Washington's overall demeanor and attitude toward the students is positive, supportive, and patient.
Every class was a crash course on a specific category of Machine Learning so as someone coming from an IT background, I definitely learned a lot. I am not too deep into the math heavy technical concepts but the level of difficulty throughout the weekly papers were a solid OK! At times when I felt completely lost, it was awesome to see that maybe a third read-through of a paper was enough for me to understand a concept.
He helped the students focus on and learn soft skills, like presenting in front of others.
Encouraging , positive
The instructor made the classroom environment very welcoming of discussion.
The way he designed the course was very interesting and interactive, giving lot of room for discussions and different view points from all the students.
Deep knowledge of the field teaching
broad concepts about AI and HAI fast grading
The instructor was very helpful in expanding on details the student's presented on. Some of the students, such as myself, are not very familiar with Machine Learning / AI, so having the extra assistance to help make sense of new topics or ideas helped a lot. The instructor was also very flexible in how we wanted to approach our topics and presentations, which was greatly appreciated.
The instructor was super helpful and very approachable.
The instructor was quite flexible with assignments, with many different ways to complete them. This flexibility gave us students the opportunity to really develop personalized projects. The hybrid class was also extremely appreciated.
Learning important areas of Human in the Loop AI
The content that the instructor did present was helpful and informative
The professor's knowledge of the various topics was solid and they were able to share enough background to each topic without being overwhelming.

5. What did you find least valuable and helpful about the instructor?
Lecture/presentation format doesn't feel that engaging. I would've liked more hands on experience in some way. My friends in other departments/classes have field work and do exciting things outside of the classroom, so I would like to see that more in a course like this, if possible
He did not always participate in the class discussions, and I think it may have been useful to step in every now and then and direct the discussion or use them as teaching opportunities.
N/A
None
I did not find anything least valuable or not helpful about Dr. Washington
Nothing, the Professor knows his stuff.
Nothing.
The instructor never gave feedback about the presentations content/style, so I feel like they varied wildly week to week. It would be more helpful to hear from the instructor about how to improve our presentations.
The instructor could have participated more in the student discussions giving their views (from their experience) on the topic.
Sometimes evaluation requirements where not clear enough, some assigment workload was underestimated (lit. review)
none
The projector had bad color issues. The instructor was great.
n/a
Possible programming could help. Unsure though.
The instructor presented less than half the class's content, with at least half of every lecture devoted to a student-led seminar.

6. The instructor is fair and objective in evaluating students.

	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.24	1204	1.0	Freq(%)	17 (1%)	30 (2%)	167 (14%)	363 (30%)	614 (51%)
College of Natural Sciences	4.14	873	1.05	Freq(%)	17 (2%)	27 (3%)	133 (15%)	283 (32%)	402 (46%)
Information& Computer Sciences	4.14	873	1.05	Freq(%)	17 (2%)	27 (3%)	133 (15%)	283 (32%)	402 (46%)
CRN (sec) 79929 (001)	4.86	21	0.36	Freq(%)	0 (0%)	0 (0%)	0 (0%)	3 (14%)	18 (86%)

7. The instructor is well prepared and organized.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.21	1690	1.1	Freq(%)	51 (3%)	59 (3%)	183 (11%)	484 (29%)	892 (53%)
College of Natural Sciences	4.06	873	1.16	Freq(%)	30 (3%)	47 (5%)	124 (14%)	249 (29%)	411 (47%)
Information& Computer Sciences	4.06	873	1.16	Freq(%)	30 (3%)	47 (5%)	124 (14%)	249 (29%)	411 (47%)
CRN (sec) 79929 (001)	4.95	21	0.22	Freq(%)	0 (0%)	0 (0%)	0 (0%)	1 (5%)	20 (95%)

8. Which aspect of the course were most valuable?
The lectures given on the different HCAI topics were the most helpful, especially those given by the professor. I am not sure I learned as much from the student presentations on the topics.
The engaging discussions and the wide breadth of the topics covered in the class
Cover most areas in AI. Help students know more about human-centered AI.
Both the Presentation to Lead a Discussion and the Research Proposal Paper are the most valuable to me. The presentation encouraged me to attain a tremendous amount of knowledge, deliberating on issues that help me to understand and interpret the topic. I have now decided to further research and gain expertise on the topic (i.e., choosing the topic as a subfield expertise in my doctorate program). I'm hoping I might further develop the Research Proposal Paper for publishing because I am extremely excited to expand and instigate the ideas.
The fact that the Professor could explain every concept and every question with supporting arguments felt like he is qualified to speak on the subject (very assuring). Most of these tenured Professors are just here to collect checks, they will not help thoroughly explain concepts at all.
This course helped us focus on soft skills, like presenting in front of others, which is often neglected in other courses.
Was able to learn technical knowledge in ML
Public speaking practice is always good, and I really enjoyed the discussions we had in the class, I learned a lot.
Since students were presenting on different topics it helped everyone see their understanding of the topic and their thought process to evaluate the particular topic. Also, it gave an insight into their research work and the discussion questions brought some important points and opinions.
SOTA knowledge in all important subfields of field (would be great to share all lecture slides reated by students)
discussion lead section really helps to understand more about the topic helps to learn how to write a literature review and proposed project outline
The breadth of topics covered was valuable. It was good to hear about all the different ways someone can approach of the field of AI, either in developing new models or techniques, or finding new applications of existing models.
The whole course was valuable and very interesting.
The course presents itself as a breadth focused one, and it succeeds on that end. I would say the most valuable aspect is the high level perspective of AI to really understand how different domains and topics interact with one another.
Learning to read papers quick, presenting, and creating a research
I think in theory all of these were great ideas: Student researches a topic to present Student does a lit review on a topic Student writes and presents a project proposal
I thought the proposal presentations, both pre and final, were really helpful and a great way to see what other students are interested in.

9. Which aspect of the course were least valuable?
The student presentations on course topics. I think a better set-up may have been to have the professor teach the topics, so that we learn the correct material, and then have the students present on the papers.
Maybe the lit review presentation was a bit overwhelming, as each student had only 5 minutes and it is hard to go in depth.
None
I found the lectures, presentations, discussions on the more technical aspects related to machine learning/deep learning quite challenging to understand. However, I did not think they were less important. Rather, I would like to have had more time to comprehend the ideas. Nevertheless, the articles assigned were very helpful.
Nothing, had fun the entire semester.
None.
There wasn't enough discussion in the class. The presentations should have been much, much shorter. I'm not sure how to get people to actively participate in discussions, but there was the same people who kept speaking up over and over, and it was hard to get anyone else to have a vocal opinion. It's possible people didn't know what they were signing up for on the first day and then discussion was never really encouraged past that.
Not enough code examples to gain practical knowledge (also if its just shared)
none
There was no part of the course that was least valuable.
n/a
In my opinion, the students' presentations of each day's general topic and instructor-selected article were not as valuable as if the instructor had used that time to do the same. Especially when some students just played youtube videos to pad out their timeslot. The value of student-led seminars to me seems in them choosing an article of specific interest to them, rather than one assigned by the instructor, and bringing their passion on that topic to the classroom. I think it would be really helpful if it were formatted as "instructor talks about general topic for 45min, then a student presents a relevant article of their choosing for ~10min and leads discussion for 15-20min." Presenting the drafts of our proposals and then presenting them again for the final version, with 3 minutes each time, did not seem like a valuable use of our time. Would've been better to have each student present their proposal only once, with twice as much allotted time. Presenting the lit reviews also did not feel like the most valuable use of time.
I think the student-led discussions were varied in effectiveness. Some were really good, but some were all over the place. Maybe in the future, there should be a general format to follow with more emphasis on talking about the specified topic for the day and then a smaller time dedicated to the paper.

10. Other comments?
The discussions in class were interesting but often felt irrelevant to the academic topic we were covering in class, and so sometimes after class was spent on a student presentation about a course topic and a long discussion I left class feeling I did not learn much. I would have enjoyed being more intellectually challenged to learn the course topics, and then have interesting discussions purely about the papers and academic subjects relating to the course material.
It was a bit stressful that we had to decide the topic for final proposal in the second week, when we had no knowledge in depth about the topics. Though the professor was lenient and allowed the students to change the topic mid semester, not having known that it would be possible at the beginning of the semester, it was tough choosing what to write about.
Hope to have a similar class in the future.
This is an excellent course! It was exactly what I was looking for- an all-encompassing study of various topics/issues/subfields reflecting Human-Centered AI. I have become more fascinated with HCI and wish to pursue further research on this topic. This class provided some valuable directions for my dissertation. If this class is offered on a regular basis, I would highly recommend it.
Thank you.
Would be good to have not only paper comments but also get some code to work or look at (shiow a notebook with example code and ask on question about)
One thing I would have appreciate is, given students' consent, to all powerpoints on Laulima. Some of the information was really useful/valuable I think, and I would have liked to view it after the class.
Maybe in the future the seminar could also have an optional lab period where students could get together to do some coding work given by the instructor, just as an optional supplemental?

11. The instructor was open to comments and questions.

	Mean	N-Size	Std Dev		Rarely	Sometimes	Frequently	Generally	Almost Always
University of Hawaii at Manoa	4.43	1406	1.02	Freq(%)	25 (2%)	59 (4%)	84 (6%)	279 (20%)	944 (67%)
College of Natural Sciences	4.29	873	1.12	Freq(%)	21 (2%)	53 (6%)	62 (7%)	194 (22%)	532 (61%)
Information& Computer Sciences	4.29	873	1.12	Freq(%)	21 (2%)	53 (6%)	62 (7%)	194 (22%)	532 (61%)
CRN (sec) 79929 (001)	5.0	21	0.0	Freq(%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	21 (100%)

12. The course was a valuable contribution to my education.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.28	1760	1.1	Freq(%)	58 (3%)	69 (4%)	156 (9%)	426 (24%)	1034 (59%)
College of Natural Sciences	4.07	873	1.15	Freq(%)	38 (4%)	52 (6%)	108 (12%)	260 (30%)	409 (47%)
Information& Computer Sciences	4.07	873	1.15	Freq(%)	38 (4%)	52 (6%)	108 (12%)	260 (30%)	409 (47%)
CRN (sec) 79929 (001)	4.67	21	0.58	Freq(%)	0 (0%)	0 (0%)	1 (5%)	5 (24%)	15 (71%)

13. I learned a lot in this course.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.28	1835	1.01	Freq(%)	45 (2%)	60 (3%)	188 (10%)	534 (29%)	996 (54%)
College of Natural Sciences	4.05	873	1.14	Freq(%)	35 (4%)	44 (5%)	125 (14%)	264 (30%)	397 (45%)
Information& Computer Sciences	4.05	873	1.14	Freq(%)	35 (4%)	44 (5%)	125 (14%)	264 (30%)	397 (45%)
CRN (sec) 79929 (001)	4.57	21	0.75	Freq(%)	0 (0%)	0 (0%)	3 (14%)	3 (14%)	15 (71%)

14. The instructor treated students with respect.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.61	40929	0.8	Freq(%)	448 (1%)	447 (1%)	1811 (4%)	8270 (20%)	29729 (73%)
College of Natural Sciences	4.47	7895	0.86	Freq(%)	100 (1%)	140 (2%)	537 (7%)	2110 (27%)	4969 (63%)
Information& Computer Sciences	4.42	873	0.95	Freq(%)	12 (1%)	5 (1%)	62 (7%)	246 (28%)	534 (61%)
CRN (sec) 79929 (001)	4.95	21	0.22	Freq(%)	0 (0%)	0 (0%)	0 (0%)	1 (5%)	20 (95%)

15. The instructor demonstrated knowledge of the course content.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.64	40929	0.78	Freq(%)	398 (1%)	340 (1%)	1464 (4%)	8046 (20%)	30411 (74%)
College of Natural Sciences	4.49	7895	0.86	Freq(%)	95 (1%)	130 (2%)	429 (5%)	2125 (27%)	5063 (64%)
Information& Computer Sciences	4.4	873	0.99	Freq(%)	16 (2%)	20 (2%)	60 (7%)	226 (26%)	540 (62%)
CRN (sec) 79929 (001)	4.86	21	0.48	Freq(%)	0 (0%)	0 (0%)	1 (5%)	1 (5%)	19 (90%)

16. This course challenged me intellectually.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.4	40929	0.92	Freq(%)	540 (1%)	859 (2%)	3294 (8%)	11675 (29%)	24247 (59%)
College of Natural Sciences	4.4	7895	0.91	Freq(%)	88 (1%)	179 (2%)	628 (8%)	2317 (29%)	4621 (59%)
Information& Computer Sciences	4.33	873	1.0	Freq(%)	15 (2%)	23 (3%)	76 (9%)	250 (29%)	499 (57%)
CRN (sec) 79929 (001)	4.62	21	0.59	Freq(%)	0 (0%)	0 (0%)	1 (5%)	6 (29%)	14 (67%)

17. The instructor both sets high standards and helps students achieve them.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.31	40929	0.99	Freq(%)	735 (2%)	1235 (3%)	3933 (10%)	11782 (29%)	22891 (56%)
College of Natural Sciences	4.07	7895	1.1	Freq(%)	244 (3%)	483 (6%)	1089 (14%)	2477 (31%)	3547 (45%)
Information& Computer Sciences	3.97	873	1.16	Freq(%)	28 (3%)	64 (7%)	153 (18%)	246 (28%)	373 (43%)
CRN (sec) 79929 (001)	4.81	21	0.51	Freq(%)	0 (0%)	0 (0%)	1 (5%)	2 (10%)	18 (86%)

UNIVERSITY of HAWAI'I
Course Evaluation System

Instructor: Peter Washington
Campus: University of Hawaii at Manoa
Department: Information& Computer Sciences

Semester: Spring 2023
Course: ICS635 Crn (Section): 89531 (001)
Enrollment: 36

1. Global appraisal: Overall how would you rate this INSTRUCTOR?

	Mean	N-Size	Std Dev		Very Poor	Poor	Average	Good	Very Good
University of Hawaii at Manoa	4.23	2040	1.0	Freq(%)	36 (2%)	84 (4%)	296 (15%)	542 (27%)	1074 (53%)
College of Natural Sciences	3.97	910	1.05	Freq(%)	22 (2%)	50 (5%)	194 (21%)	290 (32%)	350 (38%)
Information& Computer Sciences	3.97	910	1.05	Freq(%)	22 (2%)	50 (5%)	194 (21%)	290 (32%)	350 (38%)
CRN (sec) 89531 (001)	4.73	30	0.58	Freq(%)	0 (0%)	0 (0%)	2 (7%)	4 (13%)	24 (80%)

2. Considering everything, how would you rate the GA/TA's sections of this COURSE?

	Mean	N-Size	Std Dev		Very Poor	Poor	Average	Good	Excellent
University of Hawaii at Manoa	3.97	910	1.07	Freq(%)	21 (2%)	34 (4%)	206 (23%)	291 (32%)	348 (38%)
College of Natural Sciences	3.97	910	1.07	Freq(%)	21 (2%)	34 (4%)	206 (23%)	291 (32%)	348 (38%)
Information& Computer Sciences	3.97	910	1.07	Freq(%)	21 (2%)	34 (4%)	206 (23%)	291 (32%)	348 (38%)
CRN (sec) 89531 (001)	3.93	30	1.01	Freq(%)	0 (0%)	2 (7%)	10 (33%)	6 (20%)	12 (40%)

3. Considering everything, how would you rate the LAB for this course?

	Mean	N-Size	Std Dev		Very Poor	Poor	Average	Good	Excellent
University of Hawaii at Manoa	3.83	1029	1.14	Freq(%)	21 (2%)	41 (4%)	288 (28%)	309 (30%)	347 (34%)
College of Natural Sciences	3.83	910	1.16	Freq(%)	20 (2%)	29 (3%)	263 (29%)	260 (29%)	315 (35%)
Information& Computer Sciences	3.83	910	1.16	Freq(%)	20 (2%)	29 (3%)	263 (29%)	260 (29%)	315 (35%)
CRN (sec) 89531 (001)	4.21	28	0.88	Freq(%)	0 (0%)	0 (0%)	8 (29%)	6 (21%)	14 (50%)

4. What did you find most valuable and helpful about the instructor?
Use hands on exambles to demonstrate abstract concepts
The instructor was able to reduce the complex formulas into very manageable calculations for the homeworks and lectures. Many instructors in this spot would only show the general formulas in tensor / matrix notation and would not be very detail oriented. Each formula, each term, and each hypothesis for the theorems used were motivated. I also found the homeworks to have a very sane method of completion, the surrounding code is already done and the task is to hit run all.
The professor's teaching style is awesome! He doesn't stick to the old ways of teaching and makes the material of the course really fun and practical. Unlike the boring parts of old machine learning, he skips straight to the interesting stuff, and we can put into practice what we're learning. Plus, he doesn't just read off slides; he makes notes at the moment, so it's not the same old material from years ago.
I enjoyed his style of teaching. The notebook drawings he did in class were really helpful. He also focused on the key concepts instead of the math. At first, his homework was really relatable to the coursework in class and he reviewed how to do the questions in class which reinforced the learning experience. The online lectures were a major plus because it gave me time to review key concepts and take good notes. Overall, he is an amazing professor and has a lot of potential to make this class even better than it was.
Written notes
He is great at explaining complicated subjects in a simple way that is understandable.
Every time, I send an email to Professor, he always replies and does very fast.
The instructor was very knowledgeable regarding the current position of the field.
Easy going
Writing notes with us during class rather than just ripping through slides.
Highly skilled in the subject. Friendly within and outside the class. Accessible. Thorough about learning material.
Dr. Washington is very motivated to teach. Always willing to help and improve. Very updated in current teaching techniques. Provides ample resources which is key to learning. Keeps resources organized for easy access. Always accommodating, prioritizes education over other matters. Very approachable, able to connect with students immediately.
Explained complex topics, simply and clearly. Progression of the course material made sense.
Professor Washington was constantly looking for ways to improve the class and took students' feedback seriously. He is patient with questions and his assignments are challenging.
coding exercise really helps to under the material and real-world coding on the concepts
Providing code examples and recorded lectures was helpful.
always update the course material and homework guideline.
Knowledge of the subject matter and at times humor for some relief. The grading breakdown promotes learning rather than cramming.
Dr. Washington is very good at teaching concepts from a fundamental level first, and then building from it to better understand complex ideas. He provides a lot of examples, including visuals and coding notebooks. He is also very good at answering questions and providing many resources to ensure we have the guidance we need to solve our homework and complete projects.
The advice he provides outside of the lecture is very helpful.
The class was informative and very hands-on. The hand written notes were nice to keep the pace of the class.
The instructor explained things very well so that the students were able to understand it easily and always answered questions and was willing to further explain a topic if someone was confused.
Providing the videos and the notes to the lectures was helpful and much appreciated. The homework’s were actually really good and I found them useful to better understand the content.
I enjoyed that he wrote notes in person to keep the class engaged. He also asked questions often
The instructor was very knowledgable about the topic.
knows his topic very well, good understanding of basic ideas

5. What did you find least valuable and helpful about the instructor?
There is a bridge between the technical hardcore research and the intuitive feel for ML that I would like to see in the future. But I totally understand why the class covered what it did and why it did it. There were a lot of masters students and people who wanted to understand ML from a more practical perspective, so it makes sense to not cover the proof and complex chain rule derivatives for back propagation or proof of convergence / stability / stochastic probability / rate of K-Means. This is incredibly nit picky because I had to be for this question; the instructor is awesome.
Towards the end of the course, things got too fast. Concepts were reviewed at lightning speed and there were too many of them. It ruined my experience in the end of class and I lost track of what we were learning. It was great to see all the potentials in machine learning and all the new stuff, but it made me lose focus because it was TOO much. The powerpoints were fast and too much. Slim them down and make them reflect only the very key concepts. Then spend more time on the key concepts. The homework became difficult because the questions were not reviewed in good detail. Because the questions were not reviewed properly, I couldn't complete homework 5 as I could with all the other homeworks. This made my learning experience in the end of the class really bad. The questions in homework 5 were key concepts for the rest of the lectures. I think homework 5 should have been due sooner and the questions needed to be reviewed in more detail. Office hours did not provide that much assistance. The TA was not supplied the questions and answers for the homework so he was not helpful. Office hours were only 30 minutes for the professor, which made the time feel rushed and it was hard to meet during the 30 minutes. Additionally, the professor evaded giving answers during office hours. This is something that no other professor has ever done in my history of classes. If the student is going to take time out of his day to go to office hours then it is clear the student really needs assistance. The professor should walk through the question step by step until the answer is reached and understood. Many times, I left office hours confused if I did the question right because there was no reassurance on whether the answer was correct. Also the short office hours time made it feel rushed and questions could not be spent in great detail. In my opinion, office hours should be changed to be longer and the professor should be more willing to give answers to the homework questions. His assistance would be much better if he were to just give the steps to the answer and confirm with the student that his answer is correct.
Nothing
The professor recorded classes, which was really helpful. Learn a lot about ML after taking his class.
I felt like the coding notebooks weren't super helpful. It would be really helpful if you construct a neural network with students and talk through what each function is doing.
The slow pace in teaching certain sections. Mixing undergraduate and graduate courses together.
Dr. Washington could've explained the concepts better at times but I understand it is sometimes difficult to explain in layman terms to beginners. I think what would help would be to provide some analogies for better understanding of the concepts and a survey/poll to gauge the students' knowledge to better prepare for teaching.
N/A
Some topics were too high level and I felt like I was expected/needed to know a more detailed level. I felt as though I understood some of the general topics better than I understood how to actually code and implement them. Might be nice if some of the background info was skipped at the beginning of the course to provide more time for the complicated stuff like neural networks.
Coding section may be too easy for graduate students
The instructor goes through material at an almost break neck pace and the amount that students are actually able to absorb is quite low. Also, the homework covers what we learned but at a much more advanced state, making the homework extremely difficult. I think 5 homework assignments are more than enough. Also, having a final project with a large number of moving parts while also having a final exam is a bit much. Maybe having both for graduate students is okay, but those in the 400-level version must find this extremely difficult, as many students are not CS/ICS majors and have very little experience coding. The coding notebooks are also not that helpful to go over in class in that format.
His lectures lack guidance on the homework assignments. I found it difficult to apply what was done in the lecture to what the homework assignment was asking for.
For students that continuously asked a lot of questions during lecture time, it took a lot of time out for other students to learn during the lecture. If the instructor knows this students asks a lot of questions, perhaps there should be a solution for that or posting the question on zoom chat and he can answer it at the end of class.
The project at the end is not as useful. With a final homework due, final exam, and project, the focus is over saturated. Not having a final would allow for greater focus on the project vice just completing it. I didn't get a ton out of the midterm like I did the homework. The last month felt like we flew from subject to subject, more homework during that period would be helpful.
Nothing I can think of!
Sometimes for the online versions it was tough to hear questions. It was also hard to read the downloadable notes because of the paper sizing.
--

6. The instructor is fair and objective in evaluating students.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.22	910	0.94	Freq(%)	10 (1%)	21 (2%)	134 (15%)	305 (34%)	433 (48%)
College of Natural Sciences	4.22	910	0.94	Freq(%)	10 (1%)	21 (2%)	134 (15%)	305 (34%)	433 (48%)
Information& Computer Sciences	4.22	910	0.94	Freq(%)	10 (1%)	21 (2%)	134 (15%)	305 (34%)	433 (48%)
CRN (sec) 89531 (001)	4.8	30	0.76	Freq(%)	1 (3%)	0 (0%)	0 (0%)	2 (7%)	27 (90%)

7. The instructor is well prepared and organized.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.28	1406	0.98	Freq(%)	31 (2%)	26 (2%)	163 (12%)	432 (31%)	744 (53%)
College of Natural Sciences	4.2	910	0.99	Freq(%)	22 (2%)	16 (2%)	131 (14%)	299 (33%)	436 (48%)
Information& Computer Sciences	4.2	910	0.99	Freq(%)	22 (2%)	16 (2%)	131 (14%)	299 (33%)	436 (48%)
CRN (sec) 89531 (001)	4.73	30	0.78	Freq(%)	1 (3%)	0 (0%)	0 (0%)	4 (13%)	25 (83%)

8. Which aspect of the course were most valuable?
The homeworks were very valuable in that it made you re implement standard algorithms. I feel like students should make simplified / non-optimal versions of preexisting code to really understand what is going on.
Everything!
online lectures, notebook drawings
Homeworks and midterms
The subject matter is timely and important to know.
Knowing knowledge about ML
The broad range of topics helped with a general exposure to the mateiral.
covering basic topics
I enjoyed all topics.
Teaching the fundamental aspects of machine learning. Learned the basics and a broad understanding of ML in general. Sufficient depth for an undergraduate course, yet it would have been better if there were more advanced stuff taught for graduate students.
The resources provided were most valuable. Dr. Washington provided everything from slides to links to educational videos on YouTube.
THE RECORDED LECTURES!!!
This was a good introduction to machine learning topics.
giving the concepts of all ML models is very helpful to learn about ML
The provided code workbooks.
The course is designed to be accessible to students who may not have a strong mathematical background. The examples provided may involve various types of machine learning algorithms.
Large-scale overview of machine learning concepts and algorithms was extremely valuable.
I really enjoyed the coding notebooks, as it showed how I can apply the concepts we learned about in my own research and projects.
The real-world application of what this class is teaching.
I enjoyed the handwritten notes, however, I think that if there was a "note outline" that we filled out would help with structure.
The course content was very valuable and important to learn about.
The lectures were great.
The course materials and notes were incredibly useful.
The Final Project was very valuable to the course. It helped me apply what I learned.
mix of resources

9. Which aspect of the course were least valuable?
Because of the more intuitive feel for the course, this made answering some of the non coding homework questions or midterm questions harder or more ambiguous than it felt like it needed to be.
Nothing!
derivations, speedy powerpoints, not providing examples similar to the homework questions during class.
Occasionally we would get too far in the weeds on the math. Some math is absolutely needed, but sometimes it would be too much.
I would have liked a more rigorous treatment of the math underlying the methods.
none
The slow pace of certain sections of the course.
None, everything provided was important for learning.
N/A
The high level lectures with glossing over technical bits.
The large amounts of math we covered in the notes that ended up not being very important for assignments and tests.
The time spent on the complex math involved with what we were learning. I felt it was something we weren't expected to remember, and not essential to the course.
Nothing.
N/A
Midterm and I assume the final exam
The coding notebooks in class were hard to stay engaged with; perhaps if the TA was walking around and it was a more interactive lab/class session it would work better.
--

10. Other comments?
I would like to see further analysis of the packages which implement the algorithms we are using. We used a lot of datasets which are very 'clean' compared to what we would find in the real world. Creating a dataloader in TensorFlow for our own data was not discussed too much. Diagnosing bottlenecks (is my GPU being utilized, is there data starvation, when to use CPU/GPU/TPU in Colab) was not touched on too much.
Please find more professors like him, and not old school that been teaching the same material over and over without updating.
The professor is AMAZING and the class is also TOP NOTCH. If the professor could fix a couple things mentioned in Question (5) I think he could really improve the class. This professor has a lot of potential for greatness. He is very interested in the subject he teaches, has a ton of experience, and is very organized! I can see this class becoming even better in the future. As a first taught class, the professor did a really good job! I hope some of my comments in Q5 are helpful for him to improve his teaching and classes.
Thank you.
Couse is good overall. Please do not mix undergraduate and graduate classes next time.
Nope, thank you!
I think Dr. Washington is a fantastic instructor and honestly find it very difficult to say anything negative about the way he teaches. I think he has great intuition on what helps students better understand the material, and he clearly invests a lot of time in putting together the right resources to assist in his teaching.
Office hours in the afternoon, even if only on zoom, would be helpful.
This class was great, thank you Peter!
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11. The instructor was open to comments and questions.									
	Mean	N-Size	Std Dev		Rarely	Sometimes	Frequently	Generally	Almost Always
University of Hawaii at Manoa	4.37	1377	1.02	Freq(%)	29 (2%)	80 (6%)	107 (8%)	272 (20%)	885 (64%)
College of Natural Sciences	4.25	910	1.12	Freq(%)	28 (3%)	66 (7%)	75 (8%)	206 (23%)	531 (58%)
Information& Computer Sciences	4.25	910	1.12	Freq(%)	28 (3%)	66 (7%)	75 (8%)	206 (23%)	531 (58%)
CRN (sec) 89531 (001)	4.8	30	0.55	Freq(%)	0 (0%)	0 (0%)	2 (7%)	2 (7%)	26 (87%)

12. The course was a valuable contribution to my education.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.28	1550	1.02	Freq(%)	40 (3%)	53 (3%)	177 (11%)	415 (27%)	858 (55%)
College of Natural Sciences	4.13	910	1.04	Freq(%)	23 (3%)	34 (4%)	140 (15%)	289 (32%)	418 (46%)
Information& Computer Sciences	4.13	910	1.04	Freq(%)	23 (3%)	34 (4%)	140 (15%)	289 (32%)	418 (46%)
CRN (sec) 89531 (001)	4.73	30	0.52	Freq(%)	0 (0%)	0 (0%)	1 (3%)	6 (20%)	23 (77%)

13. I learned a lot in this course.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.35	1865	0.9	Freq(%)	29 (2%)	30 (2%)	175 (9%)	596 (32%)	1024 (55%)
College of Natural Sciences	4.16	910	1.0	Freq(%)	22 (2%)	23 (3%)	123 (14%)	324 (36%)	411 (45%)
Information& Computer Sciences	4.16	910	1.0	Freq(%)	22 (2%)	23 (3%)	123 (14%)	324 (36%)	411 (45%)
CRN (sec) 89531 (001)	4.77	30	0.43	Freq(%)	0 (0%)	0 (0%)	0 (0%)	7 (23%)	23 (77%)

14. The instructor treated students with respect.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.6	34961	0.79	Freq(%)	452 (1%)	374 (1%)	1614 (5%)	7262 (21%)	25132 (72%)
College of Natural Sciences	4.47	6235	0.83	Freq(%)	66 (1%)	112 (2%)	458 (7%)	1689 (27%)	3890 (62%)
Information& Computer Sciences	4.36	910	0.87	Freq(%)	7 (1%)	14 (2%)	104 (11%)	276 (30%)	504 (55%)
CRN (sec) 89531 (001)	4.97	30	0.18	Freq(%)	0 (0%)	0 (0%)	0 (0%)	1 (3%)	29 (97%)

15. The instructor demonstrated knowledge of the course content.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.65	34961	0.74	Freq(%)	377 (1%)	251 (1%)	1366 (4%)	6706 (19%)	26134 (75%)
College of Natural Sciences	4.54	6235	0.81	Freq(%)	61 (1%)	72 (1%)	379 (6%)	1520 (24%)	4172 (67%)
Information& Computer Sciences	4.4	910	0.94	Freq(%)	15 (2%)	8 (1%)	104 (11%)	217 (24%)	559 (61%)
CRN (sec) 89531 (001)	4.93	30	0.25	Freq(%)	0 (0%)	0 (0%)	0 (0%)	2 (7%)	28 (93%)

16. This course challenged me intellectually.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.4	34961	0.88	Freq(%)	501 (1%)	693 (2%)	3030 (9%)	10239 (29%)	20380 (58%)
College of Natural Sciences	4.43	6235	0.82	Freq(%)	54 (1%)	93 (1%)	485 (8%)	1972 (32%)	3604 (58%)
Information& Computer Sciences	4.38	910	0.9	Freq(%)	17 (2%)	8 (1%)	78 (9%)	287 (32%)	514 (56%)
CRN (sec) 89531 (001)	4.73	30	0.45	Freq(%)	0 (0%)	0 (0%)	0 (0%)	8 (27%)	22 (73%)

17. The instructor both sets high standards and helps students achieve them.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.34	34961	0.94	Freq(%)	641 (2%)	944 (3%)	3555 (10%)	10014 (29%)	19689 (56%)
College of Natural Sciences	4.15	6235	1.02	Freq(%)	141 (2%)	271 (4%)	910 (15%)	1945 (31%)	2941 (47%)
Information& Computer Sciences	4.05	910	1.05	Freq(%)	21 (2%)	42 (5%)	176 (19%)	273 (30%)	393 (43%)
CRN (sec) 89531 (001)	4.53	30	0.68	Freq(%)	0 (0%)	0 (0%)	3 (10%)	8 (27%)	19 (63%)

18. The instructor was available for consultation.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.39	34961	0.89	Freq(%)	489 (1%)	602 (2%)	3638 (10%)	9467 (27%)	20626 (59%)
College of Natural Sciences	4.23	6235	0.94	Freq(%)	76 (1%)	155 (2%)	957 (15%)	1950 (31%)	3066 (49%)
Information& Computer Sciences	4.16	910	1.01	Freq(%)	18 (2%)	23 (3%)	146 (16%)	292 (32%)	423 (46%)
CRN (sec) 89531 (001)	4.72	29	0.59	Freq(%)	0 (0%)	0 (0%)	2 (7%)	4 (14%)	23 (79%)

19. Considering everything, how would you rate this COURSE?									
	Mean	N-Size	Std Dev		Very Poor	Poor	Average	Good	Excellent
University of Hawaii at Manoa	4.32	34961	0.96	Freq(%)	622 (2%)	1192 (3%)	3868 (11%)	9402 (27%)	19776 (57%)
College of Natural Sciences	3.99	6235	1.09	Freq(%)	203 (3%)	404 (6%)	1143 (18%)	1927 (31%)	2540 (41%)
Information& Computer Sciences	3.92	910	1.07	Freq(%)	25 (3%)	57 (6%)	190 (21%)	304 (33%)	329 (36%)
CRN (sec) 89531 (001)	4.67	30	0.55	Freq(%)	0 (0%)	0 (0%)	1 (3%)	8 (27%)	21 (70%)

20. What was the format of this class? online synchronous (class scheduled for particular days and times) online asynchronous (class conducted online - no scheduled class meeting)											
	Mean	N-Size	Std Dev		Online Synchronous	Online Asynchronous	In Person	Hybrid: In Person and Online Synchronous	Hybrid: In Person and Online Asynchronous	Hybrid: Online Synchronous and Asynchronous	Other
University of Hawaii at Manoa	0.0	34961	0.0	Freq(%)	3212 (9%)	4562 (13%)	23724 (68%)	1554 (4%)	921 (3%)	601 (2%)	279 (1%)
College of Natural Sciences	0.0	6235	0.0	Freq(%)	297 (5%)	313 (5%)	5238 (84%)	124 (2%)	196 (3%)	18 (0%)	29 (0%)
Information& Computer Sciences	0.0	910	0.0	Freq(%)	46 (5%)	128 (14%)	491 (54%)	46 (5%)	167 (18%)	10 (1%)	15 (2%)
CRN (sec) 89531 (001)	0.0	30	0.0	Freq(%)	0 (0%)	1 (3%)	10 (33%)	3 (10%)	16 (53%)	0 (0%)	0 (0%)

21. If you answered 'Other' for the question above, please specify.
Thank you again!!

UNIVERSITY of HAWAI'I
Course Evaluation System

Instructor: Peter Washington
Campus: University of Hawaii at Manoa
Department: Information& Computer Sciences

Semester: Spring 2023
Course: ICS435 Crn (Section): 84872 (001)
Enrollment: 26

1. Global appraisal: Overall how would you rate this INSTRUCTOR?

	Mean	N-Size	Std Dev		Very Poor	Poor	Average	Good	Very Good
University of Hawaii at Manoa	4.23	2040	1.0	Freq(%)	36 (2%)	84 (4%)	296 (15%)	542 (27%)	1074 (53%)
College of Natural Sciences	3.97	910	1.05	Freq(%)	22 (2%)	50 (5%)	194 (21%)	290 (32%)	350 (38%)
Information& Computer Sciences	3.97	910	1.05	Freq(%)	22 (2%)	50 (5%)	194 (21%)	290 (32%)	350 (38%)
CRN (sec) 84872 (001)	4.33	18	0.84	Freq(%)	0 (0%)	0 (0%)	4 (22%)	4 (22%)	10 (56%)

2. Considering everything, how would you rate the GA/TA's sections of this COURSE?

	Mean	N-Size	Std Dev		Very Poor	Poor	Average	Good	Excellent
University of Hawaii at Manoa	3.97	910	1.07	Freq(%)	21 (2%)	34 (4%)	206 (23%)	291 (32%)	348 (38%)
College of Natural Sciences	3.97	910	1.07	Freq(%)	21 (2%)	34 (4%)	206 (23%)	291 (32%)	348 (38%)
Information& Computer Sciences	3.97	910	1.07	Freq(%)	21 (2%)	34 (4%)	206 (23%)	291 (32%)	348 (38%)
CRN (sec) 84872 (001)	3.78	18	1.06	Freq(%)	1 (6%)	0 (0%)	6 (33%)	6 (33%)	5 (28%)

3. Considering everything, how would you rate the LAB for this course?

	Mean	N-Size	Std Dev		Very Poor	Poor	Average	Good	Excellent
University of Hawaii at Manoa	3.83	1029	1.14	Freq(%)	21 (2%)	41 (4%)	288 (28%)	309 (30%)	347 (34%)
College of Natural Sciences	3.83	910	1.16	Freq(%)	20 (2%)	29 (3%)	263 (29%)	260 (29%)	315 (35%)
Information& Computer Sciences	3.83	910	1.16	Freq(%)	20 (2%)	29 (3%)	263 (29%)	260 (29%)	315 (35%)
CRN (sec) 84872 (001)	3.56	18	1.1	Freq(%)	1 (6%)	1 (6%)	7 (39%)	5 (28%)	4 (22%)

4. What did you find most valuable and helpful about the instructor?

Motivating
I think Dr. Washington is very good at explaining complex topics in layman's terms
He explained the difficult concepts of this course in an easy to understand way, then expanded upon it so we could gain a deeper more specific understanding.
He explained topics really well and made learning interesting
He was well prepared for lectures.
He was able to explain the high-level/abstract concepts in simple enough language to be understood easily. He also worked through multiple coding notebooks as examples of how certain techniques worked in actual coding.
great personality and lecturing style
Very open to questions and very knowledgeable. Was also very flexible in learning structure and made sure that if you didn't or couldn't attend class, all of the information that was in class is posted online. Also very flexible in assignments and assessments if something goes awry or needs to be changed. Also does a very good job in making sure each student is heard and compensated.
Intructor was very available to help. Being able to watch lecture videos online was a big help.
He is honest about what we are learning and he listens to everyone.
The instructors willingness to go through a topic should it be asked about by one of the students
His ability to simplify complex topics to make it very understandable.
The teacher was very knowledgeable, and gave concrete motivations for why certain ML concepts were important. On this note the course was well organized and provided an interesting survey of ML topics. I think that the exam based format with projects and HW was a good choice, if slightly poorly executed. Any criticisms I have are minor and I think they will be ironed out as time passes.

5. What did you find least valuable and helpful about the instructor?
I feel that sometimes due to the split between ICS undergraduates and graduates as well as graduates from other majors there was a wide spectrum of what people knew coming in making the course slow for some at first
I cannot think of anything
Nothing, amazing professor.
The homework did NOT make sense from what he covered in lecture. You get very lost in lectures and there's no going back, he drones on and on.
I found the pacing of the class assignments to be slightly imbalanced. I realize that the assignments can only be due after all the relevant material is covered, but I often found that each assignment would go over around 1-2 weeks of class material in a single assignment. Maybe more assignments in smaller sizes to help reinforce the covered material at a more even pace?
n/a
Not a lot of assignments or ways to practice. The in-class coding workbooks and assignments were good practice but that was about it. Maybe a small practice assignment every day or so that's not worth any points would be nice. Something similar to how FreeCodeCamp works but related to the topic we are learning about.
Not as much software engineering as I would have liked, personally.
The lack of homework. I believe there should have been smaller homework assignments with less weight, but more of them throughout the semester. I also believe the course should have been taught more practically than theoretically.
None.
Maybe his Handwriting? It's pretty bad. I would have preferred a slide based approach, with a couple of drawings as needed to illustrate certain concepts.

6. The instructor is fair and objective in evaluating students.

	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.22	910	0.94	Freq(%)	10 (1%)	21 (2%)	134 (15%)	305 (34%)	433 (48%)
College of Natural Sciences	4.22	910	0.94	Freq(%)	10 (1%)	21 (2%)	134 (15%)	305 (34%)	433 (48%)
Information& Computer Sciences	4.22	910	0.94	Freq(%)	10 (1%)	21 (2%)	134 (15%)	305 (34%)	433 (48%)
CRN (sec) 84872 (001)	4.56	18	0.62	Freq(%)	0 (0%)	0 (0%)	1 (6%)	6 (33%)	11 (61%)

7. The instructor is well prepared and organized.

	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.28	1406	0.98	Freq(%)	31 (2%)	26 (2%)	163 (12%)	432 (31%)	744 (53%)
College of Natural Sciences	4.2	910	0.99	Freq(%)	22 (2%)	16 (2%)	131 (14%)	299 (33%)	436 (48%)
Information& Computer Sciences	4.2	910	0.99	Freq(%)	22 (2%)	16 (2%)	131 (14%)	299 (33%)	436 (48%)
CRN (sec) 84872 (001)	4.61	18	0.61	Freq(%)	0 (0%)	0 (0%)	1 (6%)	5 (28%)	12 (67%)

8. Which aspect of the course were most valuable?
The online posted lectures were amazing since I could revisit his explanations of certain topics and the notes were well written in my opinion. Without the online lectures I think I would definitely have a hard time in this class since we don't necessarily have a designated textbook to read.
The fact that all notes and videos were available to us at all times, and the fact that we could take our midterm on our own time.
n/a
Introduction and examples of relevant machine learning techniques in the industry/research field.
broad understanding from traditional models to the latest models even up to GPT models
Lectures, coding workbooks and assignments.
A lot of good information available
Learning about many machine learning topics and learning how to apply them.
The colab notebooks were the most valuable.
The coding notebooks and homework assignments.
Probably his lectures and his videos. Recording videos is something every professor should do. Sometimes attendance is not possible, or in some way sub-optimal. Videos provide great ways to get the information out of a lecture that was not attended. He also timed the material he was covering well with our problem sets and made adjustments to due dates as necessary. I think Dr. Washington himself was a good tool in making this course go smoothly. He has a very flexible yet efficient teaching style that made this class both approachable, and informative.

9. Which aspect of the course were least valuable?
I do feel like we had a bit too few homeworks and I think future students would benefit more from frequent smaller homework assignments.
N/A
n/a
The first half of the class covered basic machine learning models (linear regression, k-nearest neighbors, etc.) that I learned already in a previous class (ICS 235). Maybe requiring ICS 235 or another class that goes over these basics could be a pre-requisite, and then this class (ICS 435/ICS 635) could be more in-depth on certain techniques?
maybe a bit more coding part that is related to and can help the homework
Lectures didn't go into huge detail on methods presented, partly to accommodate each student, but a lot of further research was needed for assignments. It was not possible for me to complete an assignment without Googling or researching further. Not sure if this was the intended plan or if this is just a symptom of an ICS course.
Classroom was cold, which made staying awake (let along paying attention) difficult
Learning about the math proofs of things.
The tablet notebooks written by the professor during classes. These slowed down the available material in a class period.
Lectures feel long and not very engaging.
Probably some of the recommended material? There was wayyyy too much of it recommended. ~200 hrs of videos and 1500 pages in books. I think most of this recommended material should have been suggested at the end of the year (as in after finals).

10. Other comments?
I unsure of the reception to this idea, but because a lot of this class more conceptual, mini quizzes testing the understanding on laulima that are worth 0 credit I think would be amazing for me since there were times where I felt as though I didn't have enough chance to test my understanding of some concepts. Small things like when to use certain models, when certain models perform good and bad, etc.
some practice coding would be nice
None
None
The coding notebooks sometimes feel very complex and hard to follow.
Relating to question 11: He was sometimes too open to questions. A couple of students would regularly ask 3-4 questions and Dr. Washington would almost always do his best to answer themin real time. Some of these questions were not trivial, nor important for an introductory class such as this. I think that if he introduced the words, "That's a good question. We can talk about it after class if you would like." Some of the classes would have gone smoother. I was so frustrated by this that I stopped showing up to class and began watching the videos so I could skip the questions that I didn't feel were important to my understanding.

11. The instructor was open to comments and questions.									
	Mean	N-Size	Std Dev		Rarely	Sometimes	Frequently	Generally	Almost Always
University of Hawaii at Manoa	4.37	1377	1.02	Freq(%)	29 (2%)	80 (6%)	107 (8%)	272 (20%)	885 (64%)
College of Natural Sciences	4.25	910	1.12	Freq(%)	28 (3%)	66 (7%)	75 (8%)	206 (23%)	531 (58%)
Information& Computer Sciences	4.25	910	1.12	Freq(%)	28 (3%)	66 (7%)	75 (8%)	206 (23%)	531 (58%)
CRN (sec) 84872 (001)	4.83	18	0.38	Freq(%)	0 (0%)	0 (0%)	0 (0%)	3 (17%)	15 (83%)

12. The course was a valuable contribution to my education.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.28	1550	1.02	Freq(%)	40 (3%)	53 (3%)	177 (11%)	415 (27%)	858 (55%)
College of Natural Sciences	4.13	910	1.04	Freq(%)	23 (3%)	34 (4%)	140 (15%)	289 (32%)	418 (46%)
Information& Computer Sciences	4.13	910	1.04	Freq(%)	23 (3%)	34 (4%)	140 (15%)	289 (32%)	418 (46%)
CRN (sec) 84872 (001)	4.44	18	0.7	Freq(%)	0 (0%)	0 (0%)	2 (11%)	6 (33%)	10 (56%)

13. I learned a lot in this course.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.35	1865	0.9	Freq(%)	29 (2%)	30 (2%)	175 (9%)	596 (32%)	1024 (55%)
College of Natural Sciences	4.16	910	1.0	Freq(%)	22 (2%)	23 (3%)	123 (14%)	324 (36%)	411 (45%)
Information& Computer Sciences	4.16	910	1.0	Freq(%)	22 (2%)	23 (3%)	123 (14%)	324 (36%)	411 (45%)
CRN (sec) 84872 (001)	4.33	18	0.69	Freq(%)	0 (0%)	0 (0%)	2 (11%)	8 (44%)	8 (44%)

14. The instructor treated students with respect.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.6	34961	0.79	Freq(%)	452 (1%)	374 (1%)	1614 (5%)	7262 (21%)	25132 (72%)
College of Natural Sciences	4.47	6235	0.83	Freq(%)	66 (1%)	112 (2%)	458 (7%)	1689 (27%)	3890 (62%)
Information& Computer Sciences	4.36	910	0.87	Freq(%)	7 (1%)	14 (2%)	104 (11%)	276 (30%)	504 (55%)
CRN (sec) 84872 (001)	4.89	18	0.32	Freq(%)	0 (0%)	0 (0%)	0 (0%)	2 (11%)	16 (89%)

15. The instructor demonstrated knowledge of the course content.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.65	34961	0.74	Freq(%)	377 (1%)	251 (1%)	1366 (4%)	6706 (19%)	26134 (75%)
College of Natural Sciences	4.54	6235	0.81	Freq(%)	61 (1%)	72 (1%)	379 (6%)	1520 (24%)	4172 (67%)
Information& Computer Sciences	4.4	910	0.94	Freq(%)	15 (2%)	8 (1%)	104 (11%)	217 (24%)	559 (61%)
CRN (sec) 84872 (001)	4.89	18	0.32	Freq(%)	0 (0%)	0 (0%)	0 (0%)	2 (11%)	16 (89%)

16. This course challenged me intellectually.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.4	34961	0.88	Freq(%)	501 (1%)	693 (2%)	3030 (9%)	10239 (29%)	20380 (58%)
College of Natural Sciences	4.43	6235	0.82	Freq(%)	54 (1%)	93 (1%)	485 (8%)	1972 (32%)	3604 (58%)
Information& Computer Sciences	4.38	910	0.9	Freq(%)	17 (2%)	8 (1%)	78 (9%)	287 (32%)	514 (56%)
CRN (sec) 84872 (001)	4.39	18	0.7	Freq(%)	0 (0%)	0 (0%)	2 (11%)	7 (39%)	9 (50%)

17. The instructor both sets high standards and helps students achieve them.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.34	34961	0.94	Freq(%)	641 (2%)	944 (3%)	3555 (10%)	10014 (29%)	19689 (56%)
College of Natural Sciences	4.15	6235	1.02	Freq(%)	141 (2%)	271 (4%)	910 (15%)	1945 (31%)	2941 (47%)
Information& Computer Sciences	4.05	910	1.05	Freq(%)	21 (2%)	42 (5%)	176 (19%)	273 (30%)	393 (43%)
CRN (sec) 84872 (001)	4.22	18	0.65	Freq(%)	0 (0%)	0 (0%)	2 (11%)	10 (56%)	6 (33%)

18. The instructor was available for consultation.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.39	34961	0.89	Freq(%)	489 (1%)	602 (2%)	3638 (10%)	9467 (27%)	20626 (59%)
College of Natural Sciences	4.23	6235	0.94	Freq(%)	76 (1%)	155 (2%)	957 (15%)	1950 (31%)	3066 (49%)
Information& Computer Sciences	4.16	910	1.01	Freq(%)	18 (2%)	23 (3%)	146 (16%)	292 (32%)	423 (46%)
CRN (sec) 84872 (001)	4.5	18	0.62	Freq(%)	0 (0%)	0 (0%)	1 (6%)	7 (39%)	10 (56%)

19. Considering everything, how would you rate this COURSE?									
	Mean	N-Size	Std Dev		Very Poor	Poor	Average	Good	Excellent
University of Hawaii at Manoa	4.32	34961	0.96	Freq(%)	622 (2%)	1192 (3%)	3868 (11%)	9402 (27%)	19776 (57%)
College of Natural Sciences	3.99	6235	1.09	Freq(%)	203 (3%)	404 (6%)	1143 (18%)	1927 (31%)	2540 (41%)
Information& Computer Sciences	3.92	910	1.07	Freq(%)	25 (3%)	57 (6%)	190 (21%)	304 (33%)	329 (36%)
CRN (sec) 84872 (001)	4.28	18	0.75	Freq(%)	0 (0%)	0 (0%)	3 (17%)	7 (39%)	8 (44%)

20. What was the format of this class? online synchronous (class scheduled for particular days and times) online asynchronous (class conducted online - no scheduled class meeting)											
	Mean	N-Size	Std Dev		Online Synchronous	Online Asynchronous	In Person	Hybrid: In Person and Online Synchronous	Hybrid: In Person and Online Asynchronous	Hybrid: Online Synchronous and Asynchronous	Other
University of Hawaii at Manoa	0.0	34961	0.0	Freq(%)	3212 (9%)	4562 (13%)	23724 (68%)	1554 (4%)	921 (3%)	601 (2%)	279 (1%)
College of Natural Sciences	0.0	6235	0.0	Freq(%)	297 (5%)	313 (5%)	5238 (84%)	124 (2%)	196 (3%)	18 (0%)	29 (0%)
Information& Computer Sciences	0.0	910	0.0	Freq(%)	46 (5%)	128 (14%)	491 (54%)	46 (5%)	167 (18%)	10 (1%)	15 (2%)
CRN (sec) 84872 (001)	0.0	17	0.0	Freq(%)	0 (0%)	0 (0%)	9 (53%)	1 (6%)	6 (35%)	0 (0%)	1 (6%)

21. If you answered 'Other' for the question above, please specify.
Technically in-person, but attendance was not mandatory. The lecture videos and other relevant materials are all online, so I chose not to go to class many times to make my transportation situation easier.
optional in person
Not an other but for question 2 and 3: We did not have a GA or TA or Lab section as far as I know.

18. The instructor was available for consultation.									
	Mean	N-Size	Std Dev		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
University of Hawaii at Manoa	4.38	40929	0.94	Freq(%)	519 (1%)	768 (2%)	4047 (10%)	11106 (27%)	24104 (59%)
College of Natural Sciences	4.17	7895	1.02	Freq(%)	143 (2%)	300 (4%)	1137 (14%)	2476 (31%)	3771 (48%)
Information& Computer Sciences	4.04	873	1.11	Freq(%)	16 (2%)	41 (5%)	154 (18%)	272 (31%)	375 (43%)
CRN (sec) 79929 (001)	4.86	21	0.36	Freq(%)	0 (0%)	0 (0%)	0 (0%)	3 (14%)	18 (86%)

19. Considering everything, how would you rate this COURSE?									
	Mean	N-Size	Std Dev		Very Poor	Poor	Average	Good	Excellent
University of Hawaii at Manoa	4.32	40929	1.0	Freq(%)	789 (2%)	1419 (3%)	4031 (10%)	10771 (26%)	23600 (58%)
College of Natural Sciences	3.95	7895	1.16	Freq(%)	347 (4%)	562 (7%)	1292 (16%)	2417 (31%)	3230 (41%)
Information& Computer Sciences	3.83	873	1.23	Freq(%)	51 (6%)	76 (9%)	151 (17%)	255 (29%)	334 (38%)
CRN (sec) 79929 (001)	4.76	21	0.54	Freq(%)	0 (0%)	0 (0%)	1 (5%)	3 (14%)	17 (81%)

20. What was the format of this class? online synchronous (class scheduled for particular days and times) online asynchronous (class conducted online - no scheduled class meeting)											
	Mean	N-Size	Std Dev		Online Synchronous	Online Asynchronous	In Person	Hybrid: In Person and Online Synchronous	Hybrid: In Person and Online Asynchronous	Hybrid: Online Synchronous and Asynchronous	Other
University of Hawaii at Manoa	0.0	40929	0.0	Freq(%)	4164 (10%)	4842 (12%)	27659 (68%)	2089 (5%)	775 (2%)	789 (2%)	349 (1%)
College of Natural Sciences	0.0	7895	0.0	Freq(%)	507 (6%)	242 (3%)	6492 (82%)	390 (5%)	162 (2%)	18 (0%)	35 (0%)
Information& Computer Sciences	0.0	873	0.0	Freq(%)	15 (2%)	71 (8%)	580 (66%)	83 (10%)	106 (12%)	3 (0%)	5 (1%)
CRN (sec) 79929 (001)	0.0	21	0.0	Freq(%)	0 (0%)	0 (0%)	6 (29%)	15 (71%)	0 (0%)	0 (0%)	0 (0%)

21. If you answered 'Other' for the question above, please specify.