Using: https://calculator.s3.amazonaws.com/index.html
I've calculated the estimated costs of a variety of different instance types. I've made some assumptions:

1. In order to fully process the NIFTI image raw data, we need to be able to hold the entire size of the NIFTI image in memory. I've estimated the size of the NIFTI image to be around 2.5 GB.
2. Our server usage will be around 80 hours per week (less than 50% up-time)
3. We will pay with On-Demand Billing.

T2 instances:
T2 instances are Burstable Performance Instances that provide a baseline level of CPU performance with the ability to burst above the baseline. The baseline performance and ability to burst are governed by CPU Credits. Each T2 instance receives CPU Credits continuously at a set rate depending on the instance size. T2 instances accrue CPU Credits when they are idle, and use CPU credits when they are active. T2 instances are a good choice for workloads that don't use the full CPU often or consistently, but occasionally need to burst (e.g. web servers, developer environments and small databases). For more information see: Burstable Performance Instances.

- FREE: 750 hours per month of Linux, RHEL, or SLES t2.micro instance usage
    - 1 vCPU (High Frequency Intel Xeon)
    - 1 GB Memory
    - 6 CPU Credits/hour (for use in bursting)
    - On-demand hourly cost: $0.013
    - Estimated monthly cost: $4.48
- T2 Small
    - 1 vCPU
    - 2 GB Memory
    - 12 CPU Credits/hour
    - On-demand hourly cost: $0.026
    - Estimated monthly cost: $8.95
- T2 Medium
    - 2 vCPU
    - 4 GB Memory
    - 24 CPU Credits/hour
    - On-demand hourly cost: $0.052
    - Estimated monthly cost: $17.89
- T2 Large
    - 2 vCPU
    - 8 GB Memory
    - 36 CPU Credits/hour
    - On-demand hourly cost: $0.104
    - Estimated monthly cost: $35.78

M4 instances:
M4 instances are the latest generation of General Purpose Instances. This family provides a balance of compute, memory, and network resources, and it is a good choice for many applications. Features: 2.3 GHz Intel Xeon® E5-2686 v4 (Broadwell) processors or 2.4 GHz Intel Xeon® E5-2676 v3 (Haswell) processors. EBS-optimized by default at no additional cost. Support for Enhanced Networking (Elastic Block Storage). Balance of compute, memory, and network resources (has more vCPU/memory than T2 instances).

- M4 Large
    - 2 vCPU
    - 8 GB Memory
    - On-demand hourly cost: $0.120
    - Estimated monthly cost: $41.28
- M4 XLarge
    - 4 vCPU
    - 16 GB Memory
    - On-demand hourly cost: $0.239
    - Estimated monthly cost: $82.22
- M4 2XLarge
    - 8 vCPU
    - 32 GB Memory
    - On-demand hourly cost: $0.479
    - Estimated monthly cost: $164.78
- M4 4XLarge
    - 16 vCPU
    - 64 GB Memory
    - On-demand hourly cost: $0.958
    - Estimated monthly cost: $329.56

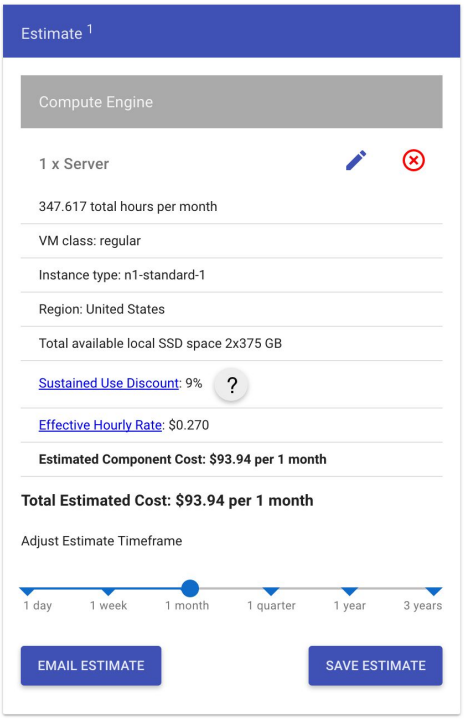
GoogleCloud also offers computational instances:

I used cost analyses conducted here: https://cloud.google.com/products/calculator/
For the analysis, I used some assumptions:

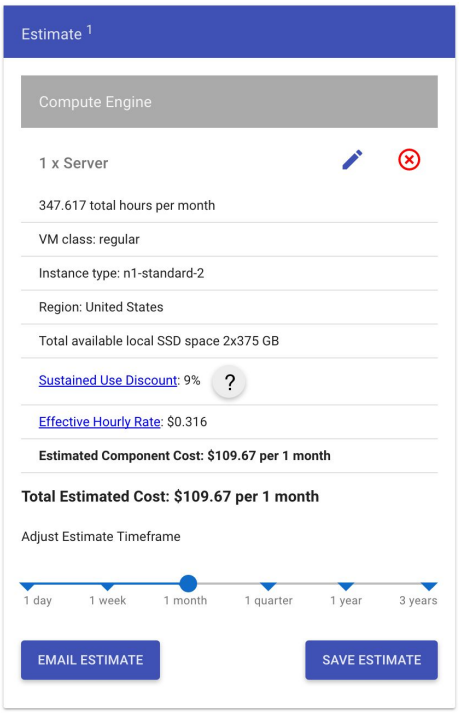
1. 11.4285 hours per day, 7 days per week (which works out to be 347.617 total hours per month, similar to the Amazon estimate)
2. Total local SSD space: 2 x 375 GB (second smallest storage? Can probably locally store results for 15 CLARITY tokens)

Machine type	Virtual CPUs	Memory	GCEU[1]	Lowest price[2] (USD) per hour with full sustained usage	Typical price[3] (USD) per hour	Full price[4] (USD) per hour without sustained use	Preemptible price[5] (USD) per hour
n1-standard-1	1	3.75GB	2.75	$0.035	$0.038	$0.050	$0.010
n1-standard-2	2	7.5GB	5.50	$0.070	$0.076	$0.100	$0.020
n1-standard-4	4	15GB	11	$0.140	$0.152	$0.200	$0.040
n1-standard-8	8	30GB	22	$0.280	$0.304	$0.400	$0.080
n1-standard-16	16	60GB	44	$0.560	$0.608	$0.800	$0.160
n1-standard-32[6]	32	120GB	88	$1.120	$1.216	$1.600	$0.320
Custom machine type	If your ideal machine shape is in between two predefined types, using a custom machine type could save you as much as 40%. Read more about Custom Machine Types.						

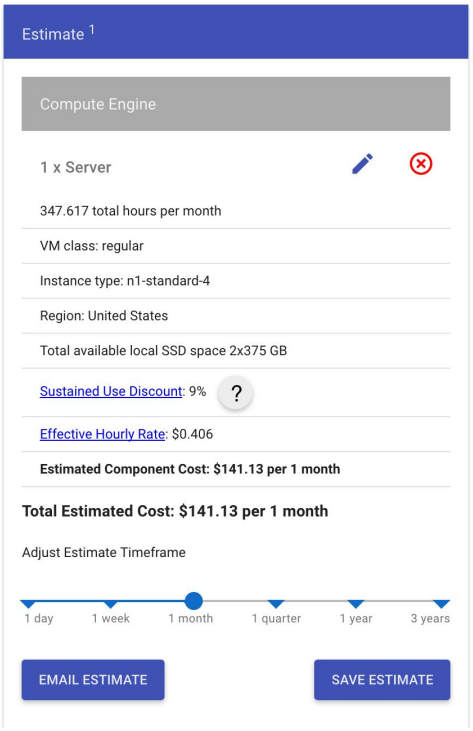
Using the cost estimate for n1-standard-1:



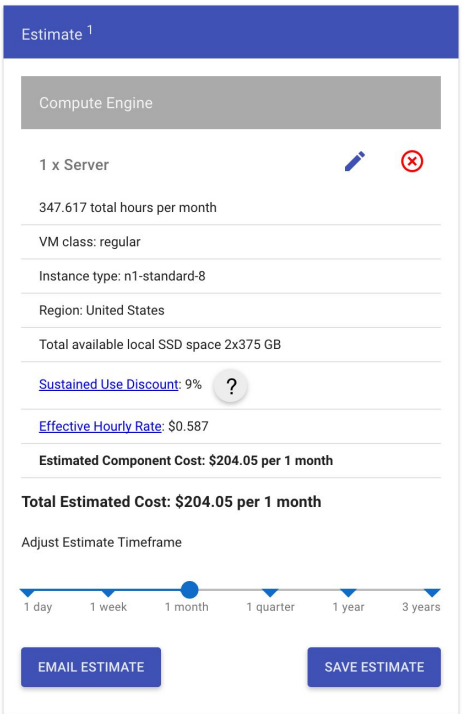
Now, for n1-standard-2:



Now, for n3-standard-1:



Now, for n4-standard-1:



Looking at the costs, we'll probably want to work with one of the following:

Amazon:

- T2 Medium
  - 2 vCPU
  - 4 GB Memory
  - 24 CPU Credits/hour
  - On-demand hourly cost: $0.052
  - Estimated monthly cost: $17.89
- T2 Large
  - 2 vCPU
  - 8 GB Memory
  - 36 CPU Credits/hour
  - On-demand hourly cost: $0.104
  - Estimated monthly cost: $35.78
- M4 Large
  - 2 vCPU
  - 8 GB Memory
  - On-demand hourly cost: $0.120
  - Estimated monthly cost: $41.28

GoogleCloud:

- n1-standard-1:
  - 1 vCPU
  - 3.75 GB Memory
  - 2 x 375 GB SSD
  - Estimated monthly cost: 93.94
- n1-standard-2:
  - 2 vCPU
  - 7.5 GB Memory
  - 2 x 375 GB SSD
  - Estimated monthly cost 109.67