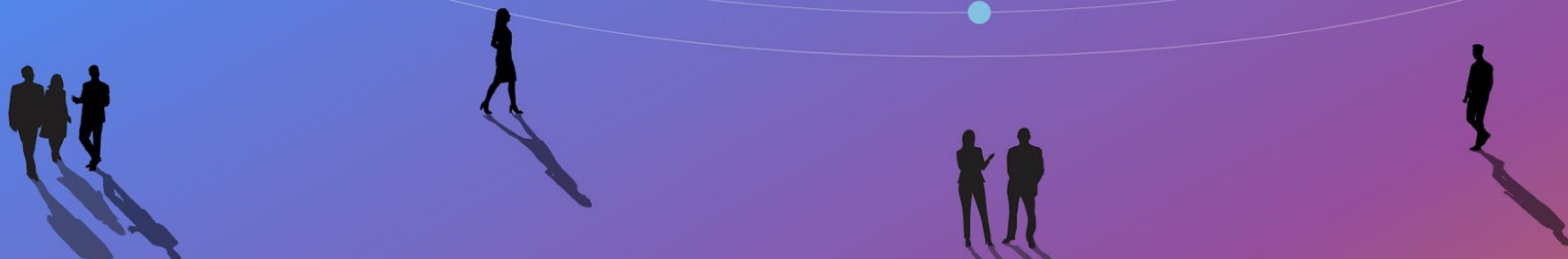


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Summer Internship Report

Presenter: Prit Sarker

Date: 08/03/2023



NSF awards
1547611
2231406

Intro

- Third year computer science Ph.D. student at the University of Nevada, Reno
- Research focus is use of artificial intelligence in healthcare



Team- Web & Mobile Applications



Tracy Brown

- Manager, Web and Mobile Applications



Sal Tijerina

- Software Developer - Engineering Scientist

Task - 1



Fix a bug for special characters input



User experience



Shell scripting, Regex, Container



Task - 2



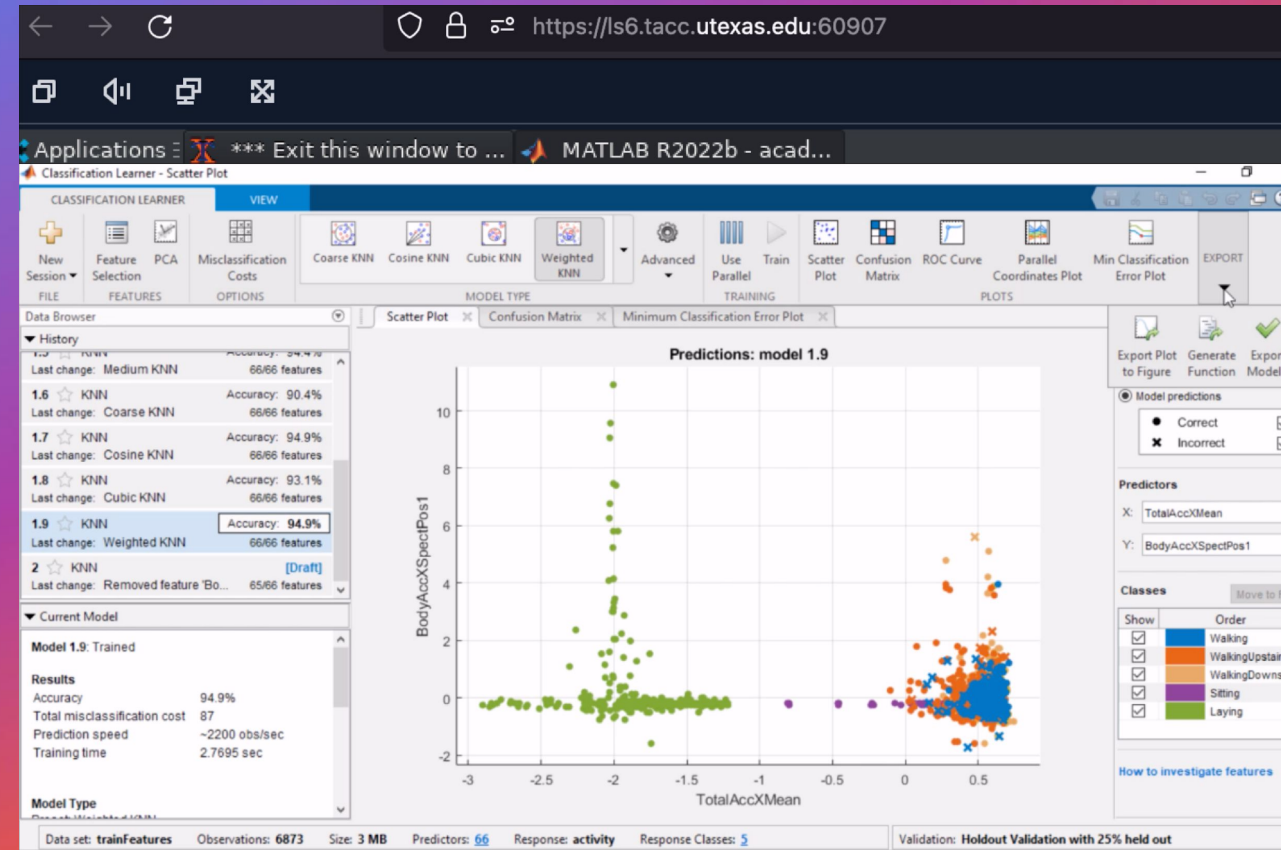
MATLAB app on LoneStar6 system



Remote session



Interactive session, Container



Task - 3



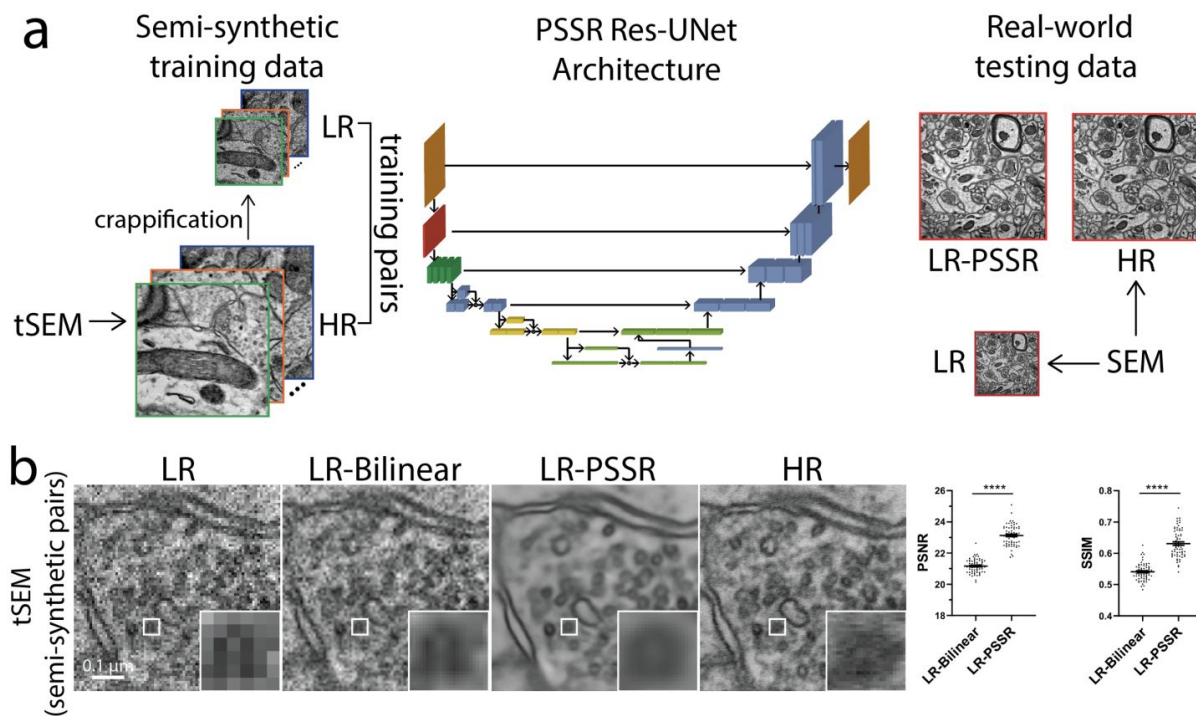
PSSR app on LoneStar6 system



Compatibility issue



Docker images, PyTorch



Task - 4



Napari app on LoneStar6
system



Multi-stage docker build,
Proper mounting



Interactive session, Container,
Binary Files



Task - 5



Add support for a selector in WMA portal



Large codebase



JavaScript, ReactJS

TACC | TEXAS

PORTAL

CORE EXPERIENCE PORTAL

The Texas Advanced Computing Center (TACC) provides powerful and intuitive web interfaces that remove technological hurdles.

This page allows you to monitor your job status, get help with tickets, and view the status of the High Performance Computing (HPC) systems. [Manage Account](#)

Dashboard

My Recent Jobs

Job Name	Job Status	Output Location	Date Submitted
<input checked="" type="checkbox"/> compress-prit-0.0.3_2023-07-28...	Finished	cloud.data/home/prithuis/tapis...	07/28/2023 18:11
<input checked="" type="checkbox"/> compress-prit-0.0.3_2023-07-28...	Finished	cloud.data/home/prithuis/tapis...	07/28/2023 17:46
<input checked="" type="checkbox"/> compress-prit-0.0.3_2023-07-28...	Failure	cloud.data/home/prithuis/tapis...	07/28/2023 17:43
<input checked="" type="checkbox"/> compress-prit-0.0.3_2023-07-28...	Finished	cloud.data/home/prithuis/tapis...	07/28/2023 17:34
<input checked="" type="checkbox"/> compress-prit-0.0.3_2023-07-28...	Finished	cloud.data/home/prithuis/tapis...	07/28/2023 17:29

System Status

Name	System Status	Load	Running Jobs	Waiting Jobs
Stampede2	Operational	72%	235	0
Lonestar6	Operational	90%	347	232
Frontera	Operational	96%	320	370

Dashboard

Data Files

Applications

Allocations

History 1

System Status

This page allows you to monitor your job status, get help with tickets, and view the status of the High Performance Computing (HPC) systems.

Dashboard

Manage

My Recent Jobs

[View History](#)

Job Name	Job Status	Output Location	Date Submitted
napari-0.4.17_2023-08-02T...	Finished	cloud.data/home/prithuls/tapis-jobs-archive/...	08/02/2023 14:12
napari-0.4.17_2023-08-02T...	Finished	cloud.data/home/prithuls/tapis-jobs-archive/...	08/02/2023 13:59
compress-prit-0.0.3_2023-...	Finished	cloud.data/home/prithuls/tapis-jobs-archive/...	07/28/2023 18:11
compress-prit-0.0.3_2023-...	Finished	cloud.data/home/prithuls/tapis-jobs-archive/...	07/28/2023 17:46
compress-prit-0.0.3_2023-...	Failure	cloud.data/home/prithuls/tapis-jobs-archive/...	07/28/2023 17:43

My Tickets

[New Ticket](#)

Number	Subject	Date Added	Ticket Status
90436	MATLAB Activation	06/27/2023	Resolved

System Status

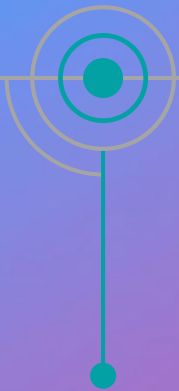
Name	System Status	Load	Running Jobs	Waiting Jobs
Stampede2	Operational	92%	381	0
Lonestar6	Operational	95%	336	454
Frontera	Operational	97%	332	383

clideo.com

Timeline

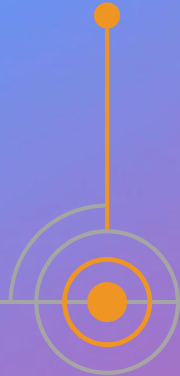
-
- A grasp of web mobile applications code base
 - Learning: Bash shell scripting, docker, apptainer

Week 1



- Introduction to Tapis Framework and Tapipy
 - Introduction to web mobile applications
-

Week 3



Week 5



- Publishing application
 - Learning: Interactive session, multi-stage docker builds
-

Week 7



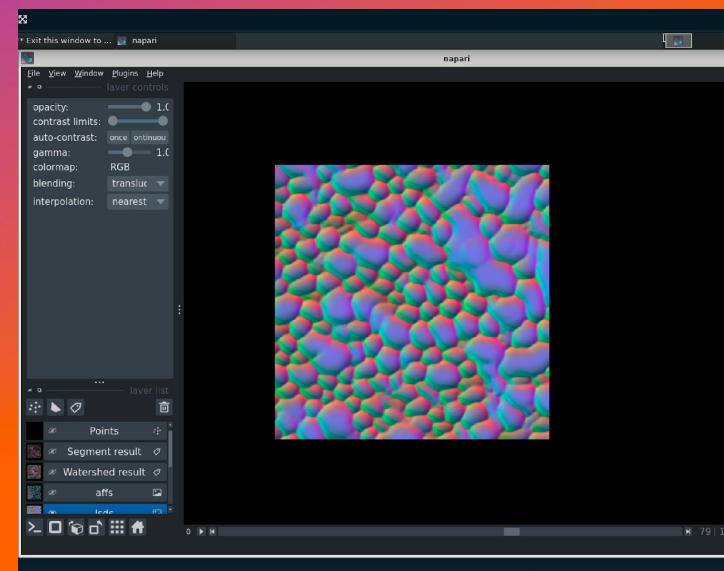
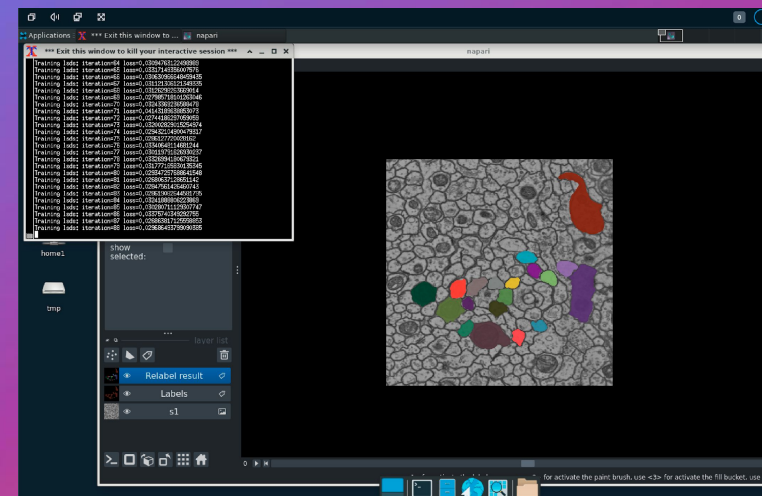
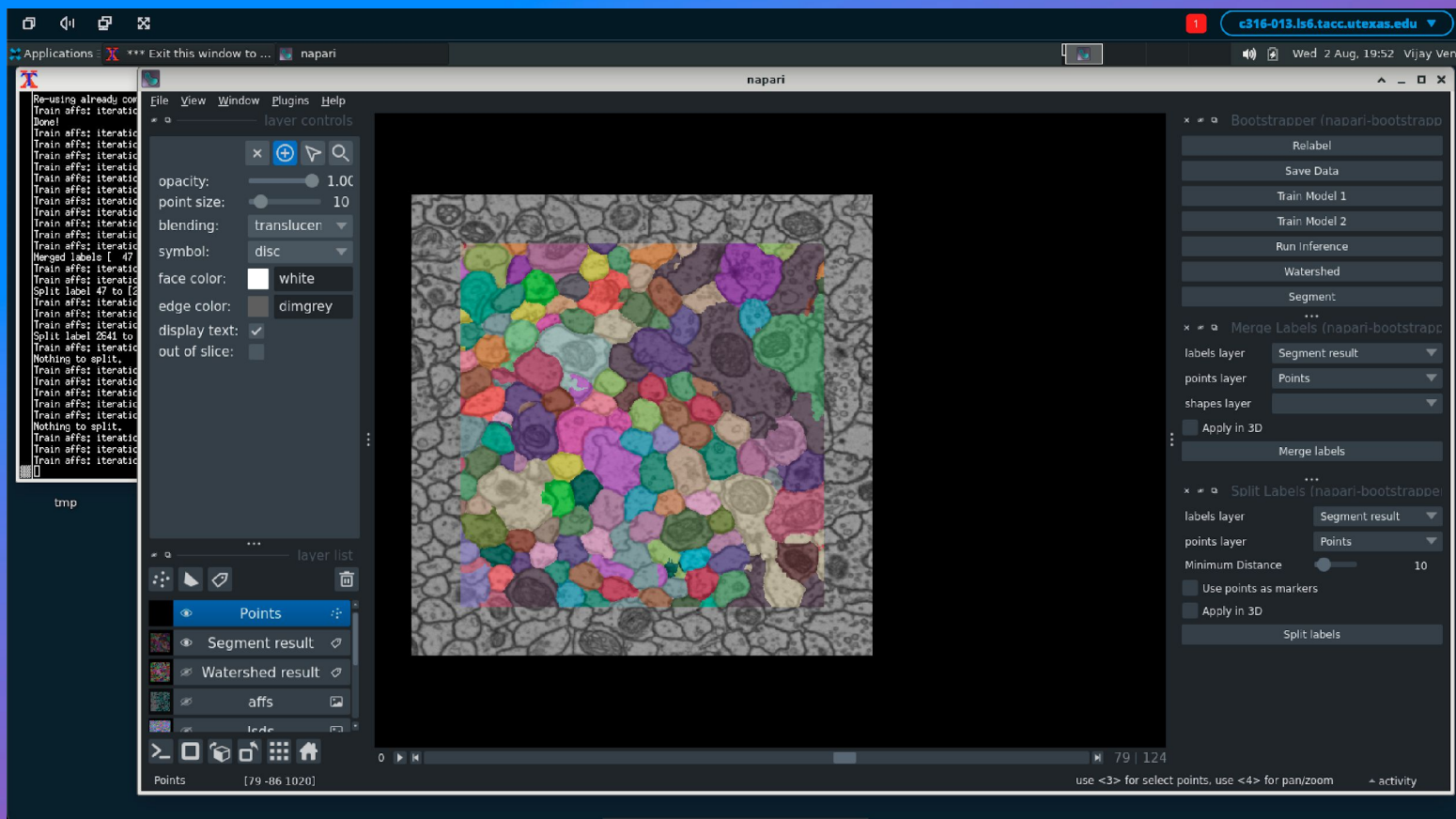
-
- Introduction to core portal code base
 - Learning: Regex, ReactJS

Week 9



- Wrapping up
 - Learning: ReactJS, JavaScript
-

A Magic Moment



Moments



Thank You!

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