Faculty Led Open Source Projects

Rensselaer Center for Open Source (RCOS)

Rensselaer Center for Open Source

A community of Open Source developers at **RPI**

Mission Statement

To cultivate an inclusive, creative, and entrepreneurial community that seeks to empower students to develop open-source solutions to real-world problems.

Developers

We are a group of passionate open source developers at RPI.

View Developers

Projects

We work on a bunch of awesome open source projects.

View Projects

Achievements

We are not your average college students.

View Achievements

RCOS is a group of RPI students who work on open source projects. Our members work on a variety of projects, which can be seen on the projects page. To see the presentation schedule look here.

Benefits of being an RCOS member

- The opportunity to help society by creating useful software.
- An excellent environment to share your skills with your peers and learn from them as well
- Great practice in the code review process, a very important skill for your software career!
- Practice giving and receiving feedback. Learning how to discuss technical and non-technical aspects of a project in a constructive fashion is a critical skill that employers look for!

Details

Students can participate in RCOS for course credit or for a stipend. At the beginning of each semester, the Internal Advisory Board will review project proposals and decide which projects should receive financial support.

Contact

For information and inquiry, please contact us via e-mail at coordinators@rcos.io.

Donations

RCOS uses funds to financially support open source software development. Follow this link if you can help us out by donating!

Statistics

Active Projects	53
Past Projects	246
Active Developers	219
Past Developers	761

Meeting Times

Please consult the RCOS Handbook for meeting times and presentation schedules.

Search

- Welcome
  - Tutorial
  - Publications
- Student
- TA or Grader
- Instructor
- System Administrator
- Developer

Submitty

Welcome

Submitty is an open source programming assignment submission system from the Rensselaer Center for Open Source Software (RCOS), launched by the Department of Computer Science at Rensselaer Polytechnic Institute.

The Submitty project is hosted on GitHub.

Key Features

- Secure testing of many languages: Python, C/C++, Java, Scheme, Prolog, SPIM, and anything available on GNU / Linux!
- Customizable automated grading with immediate feedback to students
- Advanced grading tools: static analysis, JUnit, code coverage, memory debuggers, etc.
- Student upload by drag-and-drop, zip upload, or version control
- Correct mistakes through multiple submissions, flexible ``late day'' policy, hidden tests
- Interface for complementary instructor/TA manual grading, overall grade summaries
- Instructors have full access to logs for debugging, launch batch regrading
- Scales to multiple courses with thousands of students
- Supports multiple instructors and TAs per course
- Open-source, free to use, install on your own hardware, or VPS

Contact Us

We have a public forum for questions about Submitty:
submitty@googlegroups.com
https://groups.google.com/forum/#!forum/submitty

Or you can contact the RPI Submitty development team:
submitty@cs.rpi.edu
submitty-admin@googlegroups.com

Please use the links on the sidebar to further explore Submitty.

A Rensselaer Center for Open-Source Project, 2014-2018.

RPI Computer Science > Submitty

About You

Username: wdturner
First Name: Wes
Last Name: Turner

Your Courses

Instructor:

- Spring 2019 CSCI4963 Rensselaer Center for Open Source
- Spring 2019 CSCI4966 Open Source Software
- Fall 2018 CSCI1100 Computer Science 1
- Fall 2018 CSCI4965 RCOS

Your Archived Courses

Instructor:

- Spring 2018 CSCI1100 Computer Science I
- Fall 2017 CSCI1100 CSCI1100 - CS 1

RPI Computer Science > Submitty > Open Source Software

- Course Home
- Gradeables
- Notifications
- New Gradeable
- Course Settings
- Course Materials
- Manage Students
- Manage Graders
- Manage Sections
- Student Photos
- Late Days Allowed
- Excused Absence Extensions
- Plagiarism Detection
- Grade Reports
- **Rainbow Grades**
- My Late Days/Extensions
- Collapse Sidebar

Rainbow Grades

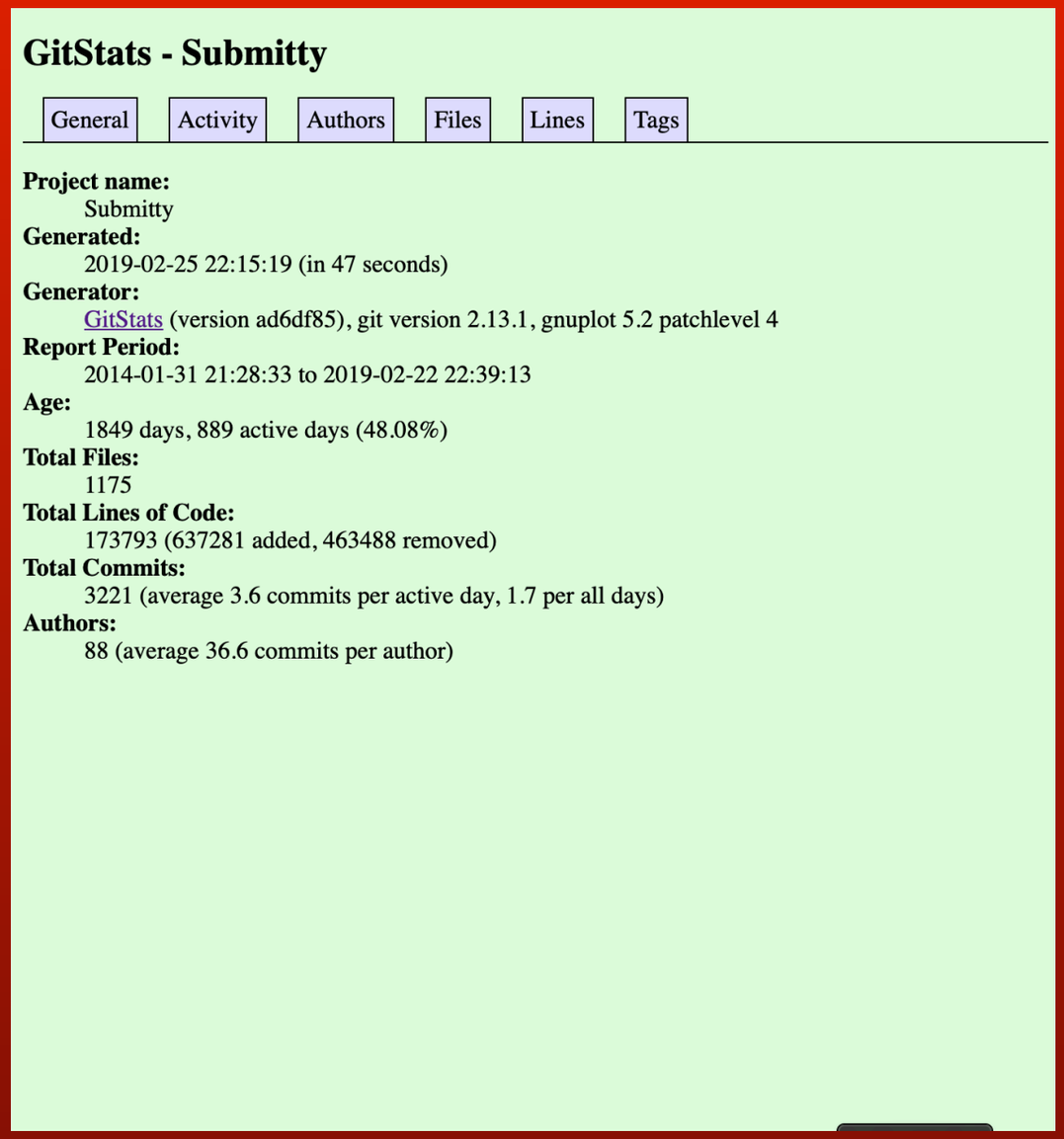
Open Source Software
Note: Please be patient with data entry/grade corrections for the most recent lab, homework, and test.
Please contact the instructor or a mentor lab if a grade remains missing or incorrect for more than a week.
Information last updated: Friday, February 15, 2019

USERNAME	wdturner	AVERAGE	STDDEV	PERFECT	LOWEST A-	LOWEST B-	LOWEST C-	LOWEST D
FIRST	Wes				approximate	approximate	approximate	approximate
LAST	Turner							
OVERALL		8.14	2.30	10.91	9.82	8.73	7.64	6.55
TEST %								
LAB %		8.14	2.30	10.91	9.82	8.73	7.64	6.55
HOMEWORK %								
PROJECT %								
Lab 1		8.8	2.0	10.0	9.0	8.0	7.0	6.0
Lab 2		8.8	2.2	10.0	9.0	8.0	7.0	6.0
Lab 3		7.1	2.1	10.0	9.0	8.0	7.0	6.0
Lab 4		9.5	1.2	10.0	9.0	8.0	7.0	6.0
Lab 5								

* = 1 late day used

Faculty Impact

- The project has been active since January 2014
- 1175 files
- 173793 lines of code (637281 added, 463488 removed)
- 88 (average 36.6 commits per author)
- Most students who choose Submitty stay on for multiple semesters



GitStats - Submitty

General | Activity | Authors | Files | Lines | Tags

Project name:
Submitty
Generated:
2019-02-25 22:15:19 (in 47 seconds)
Generator:
GitStats (version ad6df85), git version 2.13.1, gnuplot 5.2 patchlevel 4
Report Period:
2014-01-31 21:28:33 to 2019-02-22 22:39:13
Age:
1849 days, 889 active days (48.08%)
Total Files:
1175
Total Lines of Code:
173793 (637281 added, 463488 removed)
Total Commits:
3221 (average 3.6 commits per active day, 1.7 per all days)
Authors:
88 (average 36.6 commits per author)

Faculty Impact

- Importantly, Prof. Barb Cutler has the most commits
  - But the next 4 are all students
- And Faculty involvement has other benefits:
  - Submitty has participated in the Google Summer of Code
  - Prof. Cutler's guidance and availability has allowed Submitty to be installed at another RPI Department and at 3 external sites

Authors

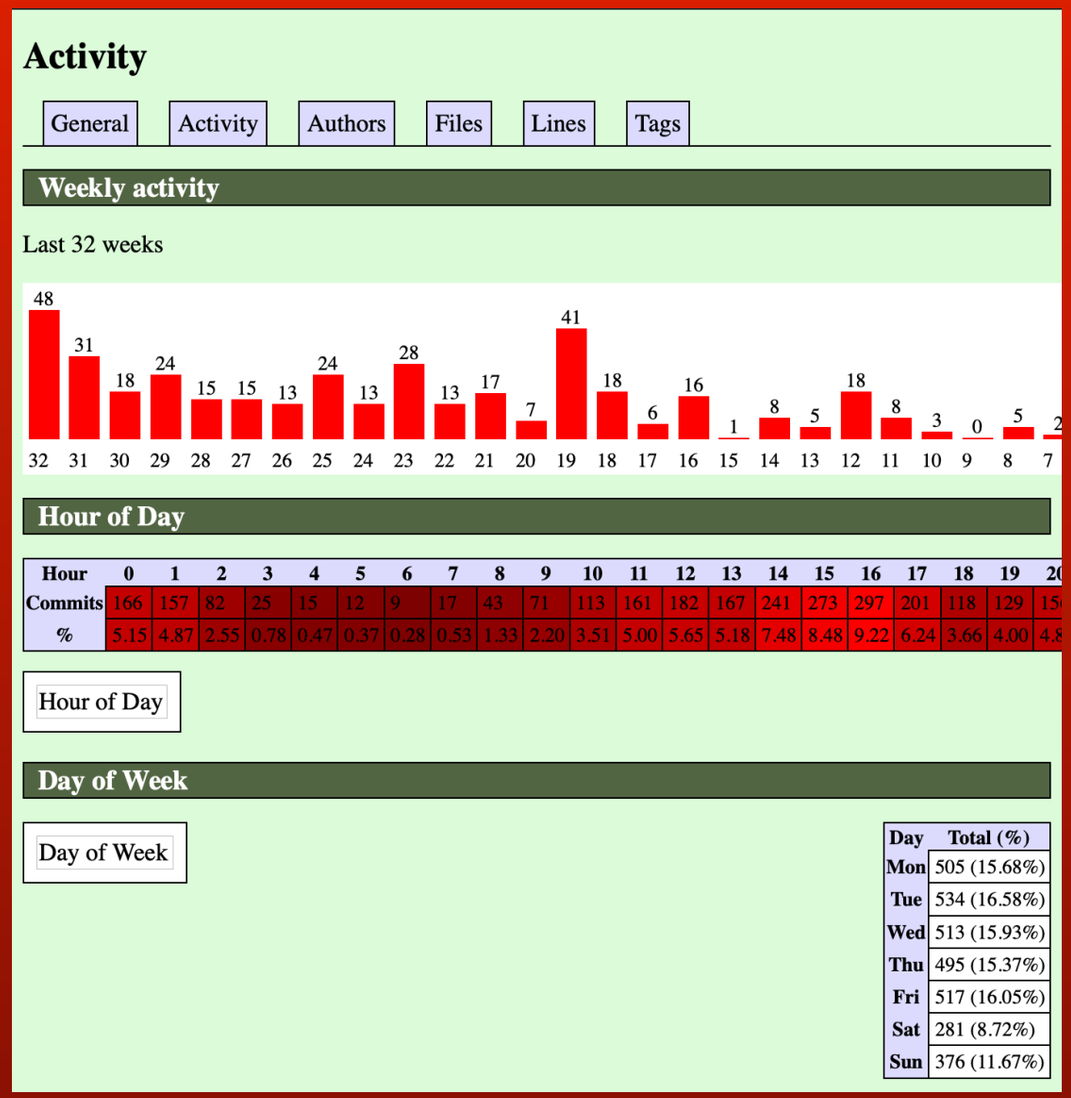
General | Activity | Authors | Files | Lines | Tags

List of Authors

Author	Commits (%)	+ lines	- lines	First commit	Last commit	Age	Active days	# by commits
Barb Cutler	654 (20.30%)	104611	78177	2014-06-21	2019-02-22	1707 days, 9:57:09	372	1
Matthew Peveler	572 (17.76%)	163750	145362	2015-01-23	2019-02-21	1490 days, 7:45:13	287	2
kmcnellis	305 (9.47%)	36364	39047	2014-02-17	2015-05-14	451 days, 16:21:18	79	3
Samuel Seng	129 (4.00%)	30447	19326	2014-04-06	2014-11-09	217 days, 16:18:51	41	4
Kevin Mackenzie	117 (3.63%)	28487	15269	2018-05-21	2019-02-13	267 days, 19:46:09	72	5
Peter Bailie	107 (3.32%)	21683	9365	2015-08-06	2018-11-16	1198 days, 4:26:30	70	6
Jesse Freitas	103 (3.20%)	9593	9349	2014-01-31	2014-09-17	228 days, 19:22:09	31	7
seveibar	96 (2.98%)	26002	13055	2014-02-13	2014-08-05	173 days, 1:59:59	19	8
Glenn Smith	79 (2.45%)	17046	11158	2018-05-22	2019-01-25	248 days, 2:47:00	47	9
inlinefan	77 (2.39%)	1248	736	2015-07-16	2016-05-25	314 days, 4:38:07	36	10
emaicus	74 (2.30%)	13718	5871	2017-06-01	2019-02-22	631 days, 3:29:49	61	11
Chris Berger	62 (1.92%)	6685	2241	2014-02-22	2014-05-09	76 days, 12:00:33	12	12
Victor Nazzaro	59 (1.83%)	68396	62182	2018-02-02	2018-12-21	322 days, 3:01:50	49	13
Andrew Aikens	58 (1.80%)	12873	8720	2017-09-24	2019-02-12	505 days, 21:49:10	48	14
ropern123	48 (1.49%)	6455	10378	2018-06-06	2018-12-07	183 days, 7:22:09	27	15
Samuel						871 days,		

Faculty Impact

- Faculty enforces the hard parts:
  - Testing Suite
  - Contribution guidelines
  - Roadmap
- And Faculty provide a continuity of effort
  - Bridge student graduations
  - Summer sessions
  - Off hours and Finals week



Activity

General | Activity | Authors | Files | Lines | Tags

Weekly activity

Last 32 weeks

Hour of Day

Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Commits	166	157	82	25	15	12	9	17	43	71	113	161	182	167	241	273	297	201	118	129	15
%	5.15	4.87	2.55	0.78	0.47	0.37	0.28	0.53	1.33	2.20	3.51	5.00	5.65	5.18	7.48	8.48	9.22	6.24	3.66	4.00	4.8

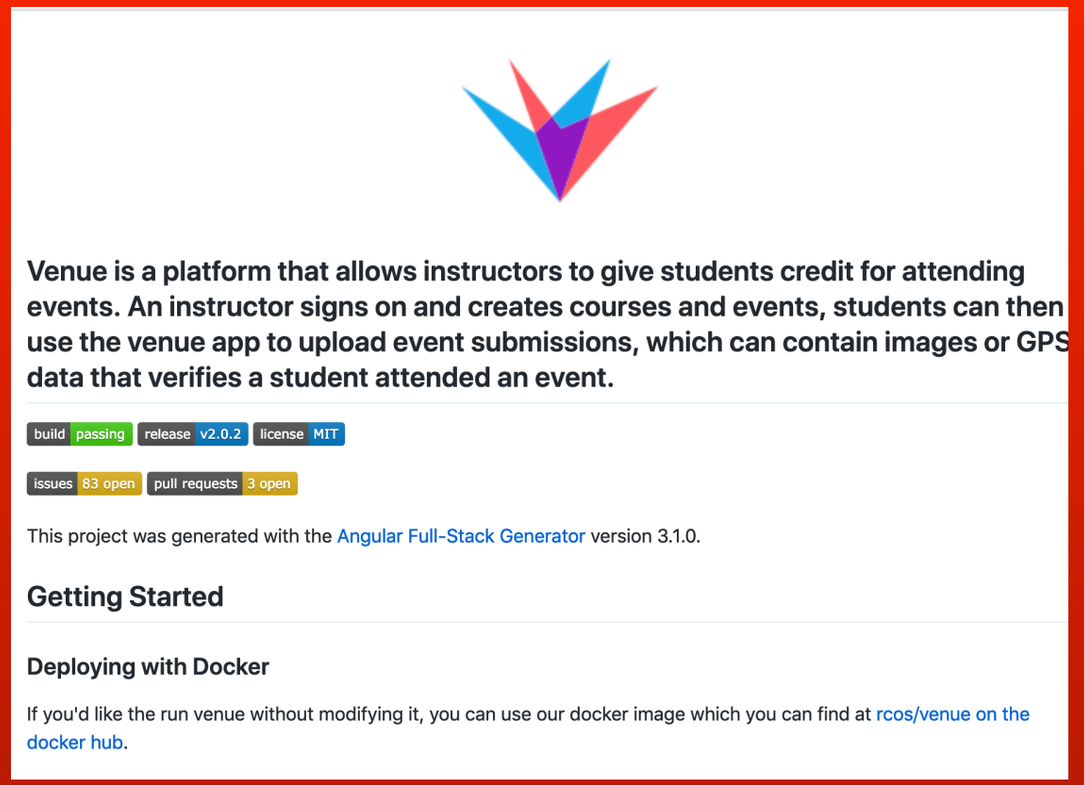
Hour of Day

Day of Week

Day of Week

Day	Total (%)
Mon	505 (15.68%)
Tue	534 (16.58%)
Wed	513 (15.93%)
Thu	495 (15.37%)
Fri	517 (16.05%)
Sat	281 (8.72%)
Sun	376 (11.67%)

We are continuing this approach with Venue, Agency, Carme among other projects.



Venue is a platform that allows instructors to give students credit for attending events. An instructor signs on and creates courses and events, students can then use the venue app to upload event submissions, which can contain images or GPS data that verifies a student attended an event.

build passing release v2.0.2 license MIT

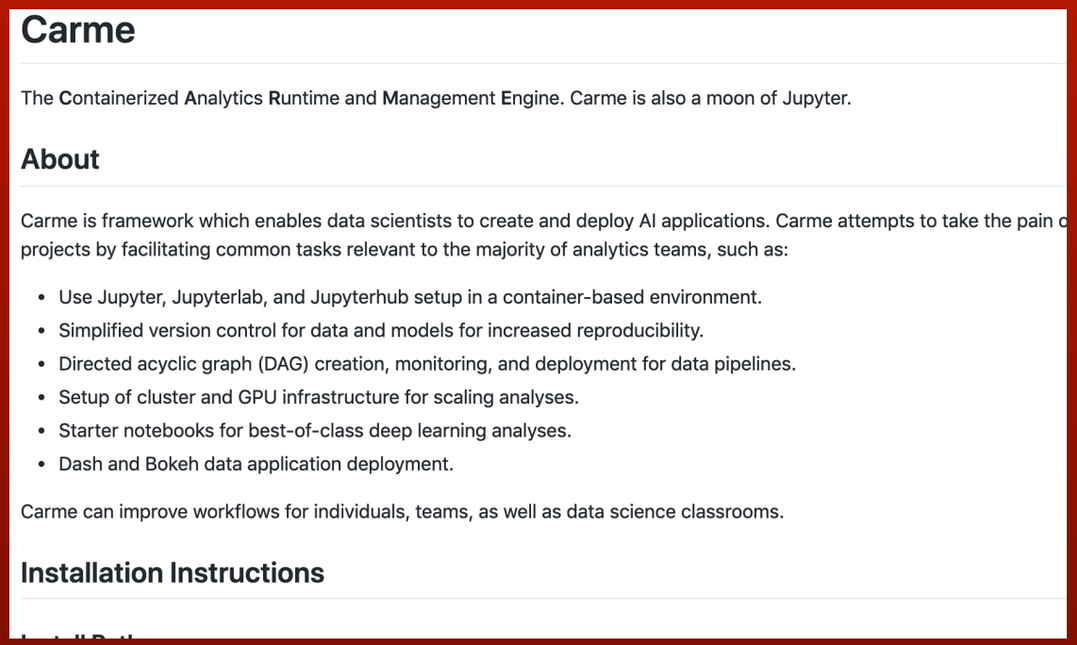
issues 83 open pull requests 3 open

This project was generated with the Angular Full-Stack Generator version 3.1.0.

Getting Started

Deploying with Docker

If you'd like the run venue without modifying it, you can use our docker image which you can find at rcos/venue on the docker hub.



Carme

The **C**ontainerized **A**nalytics **R**untime and **M**anagement **E**ngine. Carme is also a moon of Jupyter.

About

Carme is framework which enables data scientists to create and deploy AI applications. Carme attempts to take the pain o projects by facilitating common tasks relevant to the majority of analytics teams, such as:

- Use Jupyter, Jupyterlab, and Jupyterhub setup in a container-based environment.
- Simplified version control for data and models for increased reproducibility.
- Directed acyclic graph (DAG) creation, monitoring, and deployment for data pipelines.
- Setup of cluster and GPU infrastructure for scaling analyses.
- Starter notebooks for best-of-class deep learning analyses.
- Dash and Bokeh data application deployment.

Carme can improve workflows for individuals, teams, as well as data science classrooms.

Installation Instructions