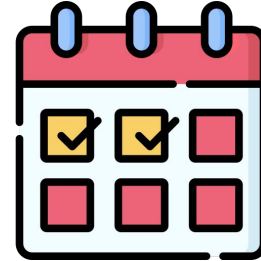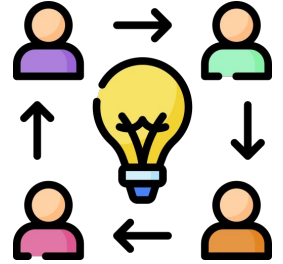# CSE 408 Project
Mock UI

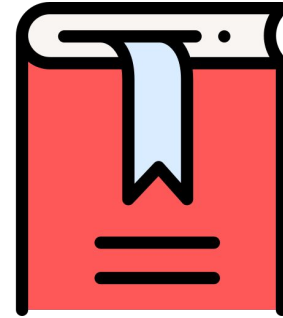1705037
1705039
1705044

Modules

- Literature Review
- Project Management
- Publishing
- Paper Reviewer

Literature Review

Literature Review

Create Paper Collections

- Save **paper links** with one click (browser extension)
- Build paper collections under a **project**

ACM DIGITAL LIBRARY

Association for Computing Machinery

Journals Magazines Proceedings Books SIGs Conferences People

Conference Proceedings Upcoming Events Authors Affiliations

Saved!   Remove

Add to project

Serv| ⊕

Serverless ML

Distributed Server

Client Server Model

RESEARCH-ARTICLE

Towards Demystifying Serverless Machine Learnir

Authors: Jiawei Jiang, Shaoduo Gan, Yue Liu, Fanlin Wang, Gustavo Alonso, Ankit Singla, Wentao Wu, Ce Zhang Authors Info & Claims

Online: 18 June 2021 Publication History

🔔 📁 ❞   🔒 Get Access

SIGMOD/PODS '21: Proceedings of the...
Towards Demystifying Serverless Machine...
Pages 857–871
← Previous   Next →

ABSTRACT

The appeal of serverless (FaaS) has triggered a growing interest on how to use it in data-intensive applications such as ETL, query processing, or machine learning (ML). Several systems exist for training large-scale ML models on top of serverless infrastructures (e.g., AWS Lambda) but with

💬 Feedback

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Conference   Proceedings   Upcoming Events   Authors   Affiliations

Saved!   Remove

Added to project 'Serverless ML' ✓

Assign Collaborators

Smith Randolph

New Collaborator   ⊕

Status   Review

Review   ▼

RESEARCH-ARTICLE

Towards Demystifying Serverless Machine Learnin

Authors: Jiawei Jiang, Shaoduo Gan, Yue Liu, Fanlin Wang, Gustavo Alonso, Ankit Singla, Wentao Wu, Ce Zhang   Authors Info & Claims

Online: 18 June 2021   Publication History

💬 3   📈 591

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▌ ABSTRACT

The appeal of serverless (FaaS) has triggered a growing interest on how to use it in data-intensive applications such as ETL, query processing, or machine learning (ML). Several systems exist for training large-scale ML models on top of serverless infrastructures (e.g., AWS Lambda) but with

💬 Feedback

Forage

Quick Access

- Home
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- Uncategorized

Project

Choose Project...

- Papers
- Tasks
- Schedule
- Submission

Unsorted Papers

Paper #1

ACM DIGITAL LIBRARY

Shuffling, Fast and Slow: Scalable Analytics on Serverless Infrastructure

Serverless computing is poised to fulfill the long-held promise of transparent elasticity and millisecond-level pricing. To achieve this goal, service providers impose a ...

Dec 12, 2021

NSDI '19

Paper #1

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Literature Review

Knowledge Sharing

- Create paper **summaries**
- Make summary **public** for others
- Easy to **revisit** and refresh content
- Read **recommended** papers

Basic	Notes	Relevant

Jiffy: elastic far-memory for stateful serverless analytics

Abstract

Stateful serverless analytics can be enabled using a remote memory system for inter-task communication, and for storing and exchanging intermediate data. However, existing systems allocate memory resources at job granularity---jobs specify their memory demands at the time of the submission; and, the system allocates memory equal to the job's demand for the entirety of its lifetime. This leads to resource underutilization and/or performance degradation when ... **See more**

Conference	Status	Assigned	Date Added
NSDI 2020	To Read ⌄	👤 👤 ⊕	**Jun 9, 2022**

Notes   Private

> **Uses** of remote memory

    1. Inter-task communication

    2. Storing and exchanging intermediate data

> **Problems**

    Ratio of peak to average storage usage for a job can vary a lot during execution

> **Effects**

    1. Resource underutilization - provisioning for peak

       Most of the time resources are unused

    2. Performance degradation - provisioning for average

       Will take a non-trivial amount of time during storage extension

Edit   Copy   Formatting help

Tasks

Read Paper	👤
Run Source Code	👤
New Task ...	⊕

Actions

🗄 Archive

🗑 Delete

Public Notes

"Jiffy: elastic far-memory for stateful serverless analytics"

Show : 20 ⌄   Sort By : Default ⌄

"Stateful serverless analytics can be enabled using a remote memory system for inter-task communication, and for storing and exchanging intermediate data. However, existing systems allocate memory resources at job granularity"

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Author : Smith, Yang
Last Updated: Dec 12, 2021

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Recommended Papers

"Jiffy: elastic far-memory for stateful serverless analytics"

Show : 20 ⌄   Sort By : Default ⌄

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Dec 12, 2021   NSDI '19

Paper #1 ⊕

Paper #1 ⊕

Paper #1 ⊕

Project Management

Project Management

Collaboration

- Start **new projects** for to explore new topics
- Share paper collections with **collaborators**

Forage

Quick Access

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Project

🚀 Serverless ML ▼

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- 📅 Schedule
- 📋 Submission

👤 ⚙ 🔔

Home

Search ... 🔍   New Project   Achive

My Projects

APT Detection
Using Provenance Graphs

Intrusion Detection
In Docker Environments

Recently Viewed

Distributed Server
In Docker Environments

Intrusion Detection
In Docker Environments

Alzheimer's Detection
Using ML Techniques

All Projects

APT Detection
In Docker Environments

Provenance Graphs
In Docker Environments

Intrusion Detection
In Docker Environments

Distributed Server
In Docker Environments

Intrusion Detection
In Docker Environments

Alzheimer's Detection
Using ML Techniques

Intrusion Detection
In Docker Environments

Alzheimer's Detection
Using ML Techniques

New Project

Serverless Machine Learning

Project Description ...

Create

Cancel

Collaborators

Start Date

10/06/22

Keywords

Serverless ✕

New Keyword.. ⊕

Domains

Big Data ✕

Select ...

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Papers

Review

Shuffling, Fast and Slow: Scalable Analytics on Serverless Infrastructure
🕐 Dec 12

Read Paper

Run Source Code

Understanding ephemeral storage for serverless analytics
🕐 Dec 22

Read Paper

Run Source Code

Barista: Efficient and scalable serverless serving system for deep learning
🕐 Dec 22

Read Paper

Run Source Code

New Task ... ⊕

In Progress

Servermix: Tradeoffs and challenges of serverless data analytics
🕐 Nov 12

Read Paper

Prepare presentation

New Task ... ⊕

Done

Serverless architecture for big data analytics
🕐 Oct 12

Read Paper

Run Source Code

Optimizing and Extending Serverless Platforms: A Survey
🕐 Oct 05

Read Paper

Prepare presentation

New Task ... ⊕

New List ... ⊕

Project Management

**Task
Lists**

- Create and **assign tasks**
- **Supervisor** can view and manage all tasks for the project
- Kanban board to track progress for papers

| Basic | Notes | Relevant |

Jiffy: elastic far-memory for stateful serverless analytics

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Notes

Private

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       Will take a non-trivial amount of time during storage extension

Edit   Copy

Formatting help

Tasks

Read Paper 👤

Run Source Code 👤

New Task ... ⊕

Actions

🗄 Archive

🗑 Delete

New Task

Read Paper & Summarize

Task Description ...

⌄

Assigned

Due Date
10/06/22 📅

Status
Next

Paper (Optional)
Atoll: A Scalable Low-Latency Serverless Platform ⌄

Prerequisite Tasks
Run source code from Github
New Task ... ⊕

Linked Tasks
Run source code from Github
New Task ⊕

Create

Cancel

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My Tasks

Task Name	Paper	Status	Project	Options
Overview paper	Shuffling, Fast and Slow ...	In Progress	Serverless ML	✏ 👤 📅 🗑
Overview paper	Atoll: A Scalable Low-Lat ...	In Progress	Serverless ML	✏ 👤 📅 🗑
Run Github repository	Speedo: Fast dispatch ...	In Progress	Caching System	✏ 👤 📅 🗑
Initial System Design		Planning	Caching System	✏ 👤 📅 🗑
Run Github repository	Shuffling, Fast and Slow ...	Planning	Caching System	✏ 👤 📅 🗑
Setup Evaluation Metrics		In Progress	Caching System	✏ 👤 📅 🗑
Overview paper	Shuffling, Fast and Slow ...	In Progress	Caching System	✏ 👤 📅 🗑

Forage

Project Tasks

Deadlines

| 10 days left | **Jun 30** |
| Finish First Draft | |

| 13 days left | **July 03** |
| Submit Paper Pre-print | |

| 14 days left | **July 04** |
| Conference: NSDI (Network ... | |

Task Name	Paper	Assigned	Status	Due
Overview paper	Shuffling, Fast and Slow ...	👩	In Progress	Jun 21
Overview paper	Atoll: A Scalable Low-Lat ...	👩	In Progress	Jun 21
Overview paper	ServerMore: Opportunis ...	👩	Next	Jun 24
Run Github repository	Speedo: Fast dispatch ...	👩👨	In Progress	Jun 21
Initial System Design			Planning	Jun 21
Run Github repository	Shuffling, Fast and Slow ...		Planning	Jun 21
Setup Evaluation Metrics		👨	In Progress	Jun 21
Overview paper	Shuffling, Fast and Slow ...	👩	In Progress	Jun 21

Publishing

Publishing

Paper Submission

- **General platform** for entire submission process
- **Suggest** to user potential conference/journals

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Serverless ML ▼

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Submission

Aug 2
Networking System Design & Implementation (NSDI)

June 21	June 24	July 14	July 29	Aug 2
Submit Abstract	Submit Manuscript	Peer Review	Submit to Editor	Approval Decision

Upcoming

July 13
IEEE International Conference on Cloud Computing (CLOUD)
Abstract Submission
Registration ✔   Abstract ✔

Aug 28
International Conference on Management of Data (SIGMOD)
Abstract Submission
Registration ✔   Abstract

Suggestions

Aug 15   *(Conflict with SIGMOD)*
IEEE International Conference on Cloud Computing (CLOUD)
Register   Save   Schedule

Sept 12
Big Data Research
Register   Save   Schedule

Computer Vision Pattern Recognition '22

June 21 — Submit Abstract
June 24 — Submit Manuscript
July 14 — Peer Review
July 29 — Submit to Editor
Aug 2 — Approval Decision

Peer Review

>	Dr. Michael Wallace	*Carnegie Melon University*	Approved
>	James Foster	*ETH Zurich*	In Progress
∨	Dr. Randall Kay	*University of Austin, Texas*	Feedback

Reviewer comment

> The genesis of this paper is the proposal that genomes containing a poor percentage of guanosine and cytosine (GC) nucleotide pairs lead to proteomes more prone to aggregation than those encoded by GC-rich genomes. As a consequence these organisms are also more dependent on the protein folding machinery.

Author comment

Comment ...

Submit | Upload

Links

Template
Website
Email

Abstract

Deadline : July 13
Last Updated : July 1

📄 Second-Draft
📄 First-Draft

New Draft

Manuscript

Deadline : July 13
Last Updated : -

New Manuscript

Publishing

Publication Scheduling
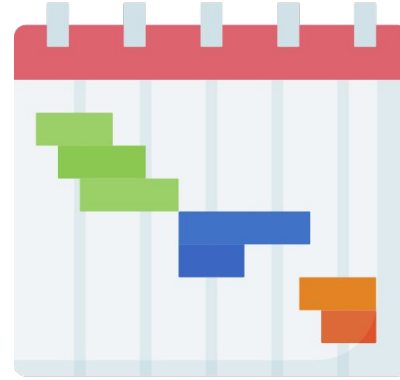
- **Schedule** generated based on chosen conferences
- Modify schedule to **avoid overlaps**

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Project

Serverless ML

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- Schedule
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Schedule

Filter   Conference, Work ⌄   Add Deadline ⊕

June 04 - 10	June 11 - 17	June 18 - 24	June 25 - 01	July 02 - 08	July 09 - 15	July 16 - 22	July 23 - 29

Manuscript

Final Literature Review

NSDI '22 Abstract

Accepted

NSDI '22 Submission

Accepted

NSDI '22 Peer Review

Feedback

Rework on feedback

Reject

Make Changes to Paper

IEEECLOUD '22 Abstract
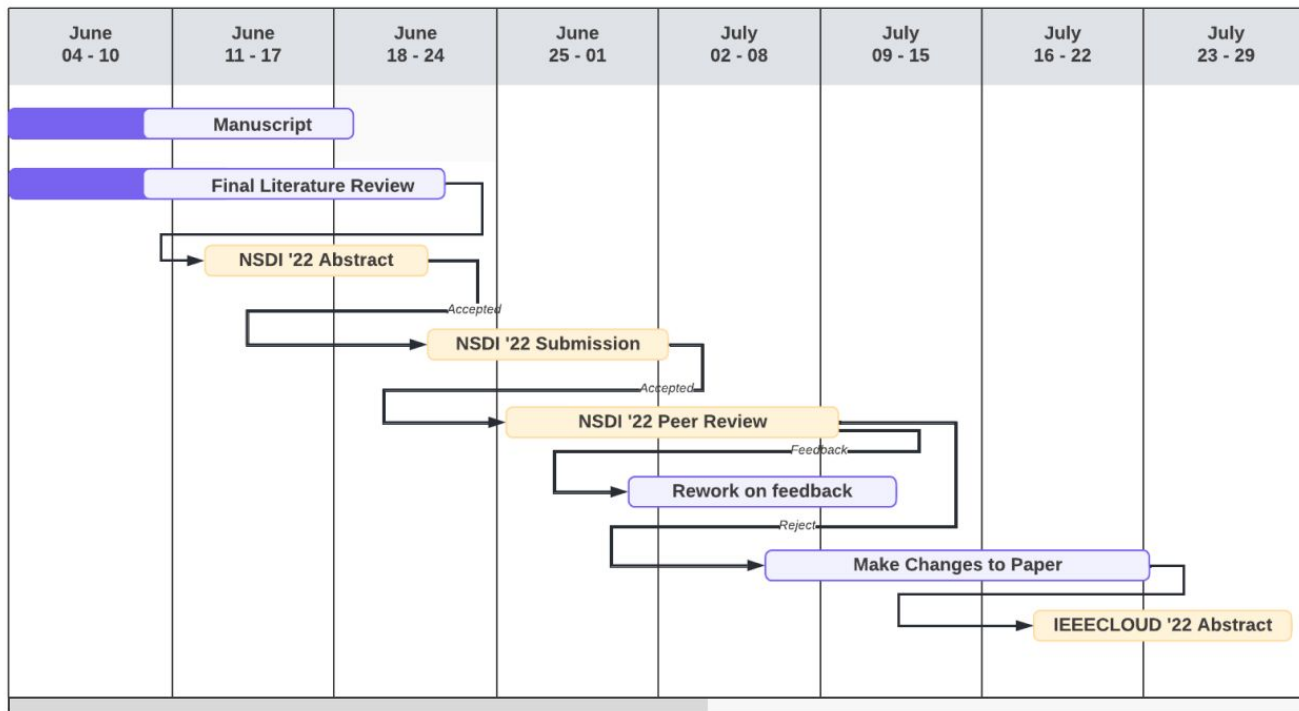
Reviewer

Reviewer

Reviewer Dashboard

- Ongoing **reviews** from different conferences
- **Feedback** to authors
- **Submit** to editor finally
- Get **requests** from different conferences

Forage

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Project

Serverless ML ▼

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Reviews

| Assigned | Proposed |

Venue	Paper	Status	Options
CVPR'22	Shuffling, Fast and Slow ...	Pending	
CVPR'22	Atoll: A Scalable Low-Lat ...	Pending	
NDSS'22	Speedo: Fast dispatch ...	Feedback	
NDSS'22	Speedo: Fast dispatch ...	In Progress	

Forage

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- 📋 Reviews

Project

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- 📄 Papers
- 📋 Tasks
- 📅 Schedule
- 📍 Submission

👤 ⚙ 🔔

Reviews

Assigned	Proposed

Venue	Paper	Options		
CVPR'22	Shuffling, Fast and Slow ...	Accept ✔	Reject ✗	Mail ✉
CVPR'22	Atoll: A Scalable Low-Lat ...	Accept ✔	Reject ✗	Mail ✉
CVPR'22	Atoll: A Scalable Low-Lat ...	Accept ✔	Reject ✗	Mail ✉

Future Plans

- Bibliography Extraction
- Experiment Result Tracker
- Implementation Planner

Thank You

Appendix

Zotero

Raindrop

WikiCFP

Welcome!

WikiCFP is a semantic wiki for Calls For Papers in science and technology fields. There are more than 100,000 CFPs on WikiCFP. Over 100,000 researchers use WikiCFP each month.

Popular Categories

Category	CFPs
computer science	7024
machine learning	4089
artificial intelligence	6419
NLP	1695
security	3402

Popular CFPs

Event	Users
ICDM 2022	94
MLDM 2023	61
ICMLA 2022	52
WSDM 2023	22
EMNLP 2022	39

Popular Lists

Owner	CFPs
hrsma2i	3
sora	16
davfof	7
come4acl...	2
kandaraj	74

Authors

+ Build my CFP list in minutes.
+ Search and sort by title, category, location and year.
+ Browse with graphical timeline.
+ Subscribe to RSS of lists and various categories.
+ Get email and iCal reminders.

Organizers

+ Present CFPs to thousands of researchers.
+ Broadcast CFPs to Twitter and Facebook.
+ Push CFPs to targeted RSS subscribers.
+ Check numbers of views and users following my CFPs.
+ Update CFP information timely.

Most Recent Calls For Papers

Add to My List

Event	When	Where	Deadline	
ACM EnergyDLT 2022	ACM SIGEnergy Workshop on Energy, Blockchain & Distributed Ledger Technology Jun 28, 2022 - Jun 28, 2022	Online	TBD	☐
EAI AICON 2022	EAI AICON 2022 - 4th EAI International Conference on Artificial Intelligence for Communications and Networks Nov 30, 2022 - Dec 1, 2022	Hiroshima, Japan	Jun 30, 2022	☐
	EAI BlockTEA 2022 - 2nd EAI International Conference on Blockchain Technology and Emerging Applications			☐