Dimas Shidqi Parikesit

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RESEARCH INTEREST

Distributed system, software reliability, system for ML, ML for system

EDUCATION

Bandung Institute of Technology (ITB), Indonesia *July 2020 – July 2024 (Expected)*
BSc, Computer Science Overall GPA **3.7 / 4.0**, Major GPA **3.7 / 4.0**

PAPER DRAFT *edit later!!!*

T2C *Under Submission to OSDI '24*
*Chang Lou, ??? **Dimas Parikesit**, ???*

RESEARCH EXPERIENCES

International Research Collaboration *November 2022 – December 2023*
on **Detecting and Pinpointing Silent Semantic Failures**

- Collaborating with Prof. Ryan Huang of University of Michigan and Prof. Chang Lou of University of Virginia.
- In charged with all the evaluations related to T2C, the main bug-checker tool of the project
- Built Daikon Invariant Detector pipeline for Apache Zookeeper, Cassandra, HDFS, and HBase to generate baseline evaluation data.
- Investigated and reproduced 6 Apache Zookeeper bugs and 3 Apache Cassandra bugs for evaluation purpose.

International Research Collaboration *April 2022 – August 2022*
on **Cache System for Deep Learning Recommendation Model**

- Collaborating with Prof. Haryadi Gunawi of University of Chicago.
- Built cache key clusters to generate approximate values for Facebook DLRM to reduce 95th and 99th latency by 27% and 22%.

TEACHING ASSISTANT

Artificial Intelligence Lab, ITB *August 2023 – December 2023*

- Artificial Intelligence

Programming Lab, ITB *January 2023 – May 2023*

- Programming Fundamentals
- Introduction to Computation

WORK EXPERIENCES

ITB Admission Exam *June 2023 – July 2023*
Load Tester

- Generated 10k users load using Apache JMeter in multiple VPS.

CS Faculty ITB *August 2022 – Present*
Sysadmin

- Managed and monitored linux faculty servers and laboratories totaling more than 170 PCs.

Capital Dynamics Sdn. Bhd. *June 2022 - July 2022*
Software Engineer Intern

- Developed company profile websites using Next JS and Directus CMS.

PROJECTS LINK GH, ABC, PANJANGIN KANAN

Distributed Queue Application

- Built toy distributed queue system based on Raft consensus.

Parallel FFT

- Implemented parallel Fast Fourier Transform algorithm using OpenMPI, OpenMP, and CUDA.

Python Syntax Checker

- Implemented Cocke-Younger-Kasami algorithm to create python syntax checker.

ACHIEVEMENTS AND AWARDS

4th Winner of Gemastik 2022 (#1 CS Competition in Indonesia, held by Ministry of Education)

- Ranked 4th out of 192 registered teams.
- Implemented time-series forecasting techniques to detect respiratory plague based on Google search trend data.

1st Winner of Datathon AI 2021 (Part of Indonesia AI Summit 2021, held by National Research and Innovation Agency)

- Ranked 1st out of 182 registered teams.
- Created suggestions regarding Indonesia's work from home policy to minimize the impact on economy and Covid-19 cases using linear and polynomial regression.

Unggulan 2020 Full Scholarship by Indonesia Ministry of Education

SKILL

OS: Linux, Windows Subsystem for Linux
PL: Java, Python, Javascript, Golang, C, C++, Bash
System: Zookeeper, Cassandra, Ceph
Platforms: Cloudlab, Chameleon Cloud, Amazon Web Services
Web: React JS, Node JS
DS and ML: Pandas, Scikit-learn, Tensorflow, RAPIDS.AI
Tools: Ansible

REFERENCES

Ryan Huang *Research Collaborator*
CSE, University of Michigan
ryanph@umich.edu

Chang Lou *Research Collaborator*
CS, University of Virginia
cqx3bu@virginia.edu

Achmad Imam Kistijantoro *Thesis Advisor*
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