

# Worapol Boontanonda

MSC STUDENT · EX DATA ENGINEER

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## Education

### MUIC (Mahidol University International College)

B.Sc COMPUTER SCIENCE

- First class honours - GPA 3.57

Nakornpathom, Thailand

Sept. 2014 - Aug. 2018

### The University of Edinburgh

M.Sc HIGH PERFORMANCE COMPUTING

- Currently studying expected to graduate in August 2022

Edinburgh, United Kingdom

Sept. 2021 - Aug. 2022

## Skills

<b>Programming</b>	Python, Javascript, Typescript, C/C++, Java, Scala, C#, Bash
<b>Development Essential</b>	Git (Github, Gitlab, Bitbucket), CICD (Gitlab), Jira/Confluence, Markdown
<b>HPC</b>	OpenMP, MPI, CUDA, Slurm, compiling on Intel/Cray/GNU/NVIDIA
<b>Cloud/Deployment Tools</b>	Docker, Kubernetes, AWS(Server, Serverless, Container), CDK, Terraform
<b>Languages</b>	Thai - Native, English - Highly Proficient, Chinese - Beginner Level

## Experience

### MUIC (Mahidol University International College)/ TTET (Toyota Tsusho Electronics Thailand)

Nakornpathom/Bangkok, Thailand

BACKEND DEVELOPER / DEV OPS

May 2017 - July 2017

- Collaborated in writing the window segmenter python program to slice data for data analysis
- Wrote deployment scripts for docker-machine to create AWS EC2 instances
- Deployed and support data science team in running their program on EC2 instances this includes creating a Dockerfile for the data science code

### TTET (Toyota Tsusho Electronics Thailand)

Bangkok, Thailand

DATA ENGINEER / RESEARCHER/ INTERNSHIP

Aug. 2017 - Sep. 2017

- Benchmark the performance of big table such as Hbase using Geomesa on traffic data vs PostGis
- Attempted to concurrently read and filter GIS data on PostGIS using Scala and compare it against Geomesa
- Concluded on the findings on Geomesa and PostGIS performance on TTET traffic data

### MUIC (Mahidol University International College) / NEXTY (Toyota Tsusho Nexty Electronics Thailand)

Nakornpathom/Bangkok, Thailand

DATA ENGINEER / DEV OPS / BACKEND DEVELOPER

Jan. 2018 - May. 2018

- Wrote a library to launch jobs/tasks on Kubernetes programmatically
- Wrote a data pumper which pump information from the RDS into Kafka
- Wrote a python connector that connect to Kafka and pull information to serve the client
- Deployed web application of the system on docker machine
- Wrote a live stream pumper which pump data from Kinesis into Kafka
- Performance optimization in pumping and consuming data in Kafka

### NEXTY (Toyota Tsusho Nexty Electronics Thailand) / TTMI (Toyota Tsusho Mobility Informatics)

Bangkok, Thailand

DATA ENGINEER

Sept. 2018 - May. 2021

- Wrote serverless backend batch processing system using AWS Lambda in Python and Javascript
- Infrastructure as a code using AWS CDK (Cloud Development Kit) using Typescript for deploying AWS server and serverless application
- Infrastructure as a code using Terraform deploying a Kubernetes base system
- Wrote backend Rest API using ExpressJS and Django
- Wrote frontend application using React
- Wrote API documentation and detail requirement of the application

### The University of Edinburgh

Edinburgh, United Kingdom

STUDENT/RESEARCHER

Sept. 2021 - present

- Threaded programming using OpenMP - benchmarking and optimising existing program using different scheduling options for parallel loop
- Messaging passing programming using MPI to parallelise existing percolation simulation program
- Benchmarking and optimising application using different compilers and compilers flags
- Converting an existing serial/CPU application to execute on a GPU using CUDA or OpenMP targets

## Honors & Awards

### DOMESTIC

- |      |   |                   |
|------|---|-------------------|
| 2016 | <b>Honorable Mention Prize</b> , Thailand IT Contest Festival | Bangkok, Thailand |
| 2022 | <b>Participant</b> , ISC Student Cluster Competition          | Hamburg, Germany  |