

# Zohan Syah Fatomi

Curriculum Vitae

## PERSONAL DETAILS

Website	<a href="https://zohansyahfatomi.github.io">zohansyahfatomi.github.io</a>
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GitHub	<a href="https://github.com/zohansyahfatomi">https://github.com/zohansyahfatomi</a>

## PORTOFOLIO

1. Publishing Python and Numerical Computation book ISBN: 978-602-386-957-2 ([shorturl.at/msGHU](#)).
2. Publishing an international journal in Computational Condensed Matter ([shorturl.at/bhrGY](#))
3. Attending International Symposium on Computational Science 2021 Kanazawa University (Japan) as Presenter ([shorturl.at/jtT58](#))
4. Attending International Conference ICMA-SURE 2022 Jenderal Soedirman University (Indonesia) as Presenter ([shorturl.at/htAN3](#))
5. Attending International Conference ICST 2022 Gadjah Mada University (Indonesia) as Presenter ([shorturl.at/cgEF2](#))

## EDUCATION

<b>Kanazawa University (Japan)</b> <i>Applied Mathematics and Computational Science</i> Research Focus: Material properties prediction, Machine Learning, Deep Learning	2019-2021
<b>Universitas Gadjah Mada (Indonesia)</b> <i>Physics</i> Research Focus: Material science, Numerical Simulation, Density Functional Theory	2014-2019

## WORK EXPERIENCE

<b>Research Assistant</b> (Jenderal Soedirman University) <ol style="list-style-type: none"><li>1. Performing computational science research with lab members.</li><li>2. Conduct academic publication in an international journal.</li><li>3. Detail tools: Python, Mathematical modeling, Numerical Calculation, Machine Learning, Deep Learning (PyTorch).</li></ol>	1/9/2022- Now
<b>Python Developer (Back End)</b> (Bitwyre Exchange) <ol style="list-style-type: none"><li>1. Discussion with the team to deliver features exchange.</li><li>2. Building crypto exchange algorithm to provide low-latency transactions.</li><li>3. Fix bugs, build testing, and manage micro-service system Python-related projects.</li></ol>	12/22/2021- 31/8/2022

4. Making endpoint based on event distributive system.
5. Detail tools: Python, SQL, Apache Kafka (Redpanda), Flask, Git, Pandas, Docker, TensorFlow, Keras, Scikit-Learn, matplotlib, ggplot.

### Research Assistant

01/21-04/21

*Saito Lab. (Kanazawa University)*

1. Discussion with Lab. members to set the research goals.
2. Collaborate with Lab. members to process data obtaining, data analysis, and data visualization.
3. Final presentation of the International Symposium on Computational Science 2021, Kanazawa University, Japan ([hal.s.kanazawa-u.ac.jp/iscs2021.html](http://hal.s.kanazawa-u.ac.jp/iscs2021.html)).

### Research Assistant

08/18-07/22

*Computational Physics Lab. (Universitas Gadjah Mada)*

1. Teaching and tutoring of python programming and numerical analysis to the Lab. members.
2. Publishing educational book of "Pemrograman dan Komputasi Numerik Menggunakan Python" UGM PRESS, ISBN: 978-602-386-957-2 (<https://www.tokopedia.com/ugmpressonline/pemrograman-dan-komputasi-numerik-menggunakan-python>).
3. Publishing international reputable journal of Computational Condensed Matter (<https://doi.org/10.1016/j.cocom.2022.e00708>)

## KEY SKILLS

### Numerical Analysis and Machine Learning

Able to make a numerical simulation or model for real-world problems by using programming. Able to perform machine learning techniques such as supervised learning, unsupervised learning, reinforcement learning, and deep learning.

### Data Handling and Analysis

Being proficient in handling and analyzing data includes data preprocessing, cleaning, feature engineering, and exploratory data analysis (EDA).

### Neural Networks

Understanding various neural network architectures (e.g., convolutional neural networks, recurrent neural networks)

### Natural Language Processing (NLP)

Able to demonstrate NLP techniques such as text classification, sentiment analysis, and named entity recognition)

### Computer Vision

Able to perform computer vision involves extracting information from images and videos such as classification, object detection, image segmentation, and image generation

## RELEVANT INFORMATION

**Math Skills:** Numerical Calculation, Linear Algebra, Calculus, Statistic, Probabilistic, Discrete Mathematics, etc.

**Programming Language:** Python (Numpy, Pandas, Scipy, Matplotlib, Scikit-Learn, Pytorch, Flask, Django, etc), Java (Minor), C++ (Minor)

**Data Visualization Tools:** Excel, Google Sheets, Matplotlib, Tableau

**CI/CD:** Git, Github, Docker, Apache Kafka (Redpanda)

**Database:** SQL/NoSQL, PostgreSQL

**Machine Learning:** Scikit-Learn, Pytorch, TensorFlow

**Language:** English (B2 Level), Indonesia, Japanese (Minor)