

# Fandi A. Wiranata

✉ [fandi.z.w@gmail.com](mailto:fandi.z.w@gmail.com)

in <https://www.linkedin.com/in/fandi-a-wiranata/>

👤 <http://fandiazam.com/>

🐙 <https://github.com/fandiazam>

## RESEARCH INTERESTS

Computer **Systems**, **Cloud** Computing, Wireless Communication **Networks** (i.e. LTE, 5G, Wifi), and SDN&NFV.

## EDUCATION

2018 - School of Electrical Eng. and Informatics, **Institut Teknologi Bandung (ITB)**, Bandung, Indonesia.

Present Undergraduate in Telecommunication Engineering, GPA 3.54 out of 4.0.

## PUBLICATIONS

2020 **Fandi A. Wiranata**, Wervyan Shalannanda, Rahmat Mulyawan, and Trio Adiono. **Automation of Virtualized 5G Infrastructure Deployment Using Mosaic 5G Operator over Kubernetes Supporting Network Slicing** in the 14<sup>th</sup> International Conference on Telecommunication Systems, Services, and Applications (TSSA).

## TALKS

2020 **Automation of Virtualized 5G Infrastructure Deployment Using Mosaic 5G Operator over Kubernetes Supporting Network Slicing** in the 14<sup>th</sup> International Conf. on Telecommunication Systems, Services, and Applications (TSSA).

## EXPERIENCE

Feb 2021 - **Remote Research Assistant at University of Chicago – US**

- Present
- Work with Prof. Haryadi S. Gunawi and his PhD students to conduct research on creating ML model integrated with distributed systems to reduce tail latencies.
  - Remote work from Indonesia in UCARE Lab.

Jan 2021 **AUN-KU Winter Courses at Kyoto University – Kyoto, Japan**

- Student Mobility Program toward Human Security Development (HSD) that's designed for undergraduate students to study the concept of HSD and Energy Science.
- As one of 35 selected students from 10 countries of the ASEAN Uni. Network (AUN).

Sep 2020 – **Internship at Xirka Silicon Technology Inc. – Bandung, Indonesia**

- Oct 2020
- Developed Virtualized 5G Infrastructure using OpenAirInterface (OAI) on Xirka resources. The Virtualized 5G Infrastructure also support Radio slicing.
  - Supervised by Prof. Trio Adiono.

Jul 2020 – **Research Internship at NTUST – Taipei, Taiwan**

- Aug 2020
- Worked on Mosaic5G Project to integrate Mosaic 5G with several platforms (OAI, Kubernetes, ElasticSearch, and Operator SDK) to create virtualized 5G infrastructure.
  - Supervised by Prof. Ray-Guang Cheng.

Jan 2020 – **Pre-Research Intern at NTUST – Bandung, Indonesia**

- Mar 2020
- This is a remote research mentorship program for talented International students in collaboration at BMW Lab, NTUST.
  - Focused on studying LTE and 5G Architecture and having weekly report and assignment that teach me to stay productive. Supervised by Prof. Ray-Guang Cheng.

Jun 2019 - **Telecommunications Student Association – ITB**

- Present
- Be the part of the highest executive organization at Telecommunications Engineering major who manage and run students.
  - I made exercise books to improve student academic.

Oct 2018 - **Syamsi Dhuha Foundation – Bandung, Indonesia**

- Present
- SDF is an NGO that care on lupus and low vision.
  - Managed and run the biggest World Lupus Day and World Sight Day celebrations in Indonesia.

## TEACHING ASSISTANT

|        |  |      |
|--------|--|------|
| ET2103 | <b>Electric Circuit Course</b> at <b>ITB</b> .   |      |
|        | <ul style="list-style-type: none"> <li>Given 2 hours/week to do in-class teaching about the fundamentals of electric circuit for 2<sup>nd</sup>-year students. I must spend ~10 hours/week for the TA-related tasks.</li> <li>Under Dr. Eng. Achmad Munir.</li> </ul>    | 2020 |
| EL1200 | <b>Introduction to Circuit Analysis Course</b> at <b>ITB</b> .   |      |
|        | <ul style="list-style-type: none"> <li>Given 2 hours/week to do in-class teaching about the basic concepts of electric circuits for 1<sup>st</sup>-year students. I must spend ~10 hours/week for the TA-related tasks.</li> <li>Under Dr. Eng. Achmad Munir.</li> </ul> | 2020 |

## COMPETITIONS

|                       |               |  |      |
|-----------------------|---------------|--|------|
| On-going              | International | <b>Interview stage</b> for <b>CERN Summer Student Programme</b> at Switzerland   | 2021 |
| On-going              | Asia-Pacific  | <b>Indonesia representative</b> for <b>Huawei - ICT Competition</b> in April   | 2021 |
| 1 <sup>st</sup> Place | National      | <b>Huawei - ICT Competition</b> at <b>Cloud Track</b> , won USD2500. Next, representing Indonesia's Cloud team for <b>Regional Asia-Pacific</b> .  | 2020 |
| 3 <sup>rd</sup> Place | Regional      | <b>Huawei - ICT Competition Preliminary Stage</b> at <b>Cloud Track</b> . Representing ITB's Cloud Team for <b>National level</b> .  | 2020 |
| 3 <sup>rd</sup> Place | National      | <b>Paper Writing Competition</b> at State University of Surabaya. We built a <b>reactor</b> to improve pollution filtration which include <b>monitoring systems</b> .                    | 2020 |
| 1 <sup>st</sup> Place | International | <b>Sustainability Drives Innovation</b> at <b>University of Malaya, Malaysia</b> . We created a green paddle efficiency design to improve the performance of boat.                       | 2020 |
| 3 <sup>rd</sup> Place | International | <b>Idea Competition (Hackathon)</b> at ITB. We built an IoT system to solve the garbage problem by Integrating Eco-Friendly Trash Can and GoTrash App.                                   | 2019 |
| 1 <sup>st</sup> Place | National      | <b>Essay Writing Competition</b> at ITB. We initiated a system to optimize waste that is <b>Integrated Waste Quality Monitoring System</b> .   | 2019 |
| 1 <sup>st</sup> Place | National      | <b>Industrial Engineering Scientific Fest</b> at U. of Singaperbangsa Karawang. We initiate the use of snails as aggressive periodontitis prevention materials.                          | 2019 |
| 4 <sup>th</sup> Place | National      | <b>Industrial Engineering Scientific Fest</b> at U. of Singaperbangsa Karawang.  | 2019 |
| Semifinalist          | National      | <b>Paper Writing Competition</b> at Indonesian Institute of Sciences ( <b>LIPI</b> ). Top 20 out of 3500 papers in social and behavioral sciences topic.                                 | 2017 |
| Finalist              | National      | <b>Industrial Automation and Robotic Competition</b> at Institut Teknologi Sepuluh Nopember (ITS).   | 2016 |
| Finalist              | National      | <b>Paper Writing Competition</b> at Indonesian Institute of Sciences ( <b>LIPI</b> ). We built a tool to optimize industry's air pollution <b>filtration</b> using Ca(OH) <sub>2</sub> . | 2016 |
| Semifinalist          | National      | <b>Paper Writing Competition</b> at Diponegoro University, Semarang.   | 2015 |
| 1 <sup>st</sup> Place | National      | <b>Paper Writing Competition</b> at State Polytechnic of Malang. We built a tool that utilize gravity and gear optimization to create <b>renewable electricity</b> .                     | 2015 |

## AWARDS

|             |  |      |
|-------------|--|------|
| Education   | The <b>most outstanding student</b> of <b>School of Electrical Eng. and Informatics</b> , ITB  | 2021 |
| Education   | The <b>most outstanding student</b> of Telecommunication Engineering   | 2021 |
| Volunteer   | <b>Best volunteer</b> at Syamsi Dhuha Foundation   | 2020 |
| Scholarship | <b>Granted scholarships for monthly expenses</b> from Syamsi Dhuha Foundation.   | 2020 |
| Scholarship | <b>Granted a full scholarship for my tuition fees</b> during my study in Institut Teknologi Bandung. The details can be looked at the official website: <a href="http://www.itbuntuksemua.com">www.itbuntuksemua.com</a> . | 2018 |

## COURSE PROJECTS

|      |  |
|------|--|
| 2020 | <b>Design and Optimization</b> of Slotted Microstrip Antenna for 3.8-4.0 GHz Application.                |
| 2020 | LoVi: Blind Assistance System for Low Vision with Distance and Voice Alerts Using <b>Deep Learning</b> . |
| 2019 | <b>Smart Parking System</b> : Monitor and Control the Parking Lot.                                       |

## SKILL CERTIFICATION

|                             |   |      |
|-----------------------------|---|------|
| <b>Cloud Computing</b>      | <b>HCIA - Cloud Computing</b> from <b>Huawei</b> . Capable of collaborating in the deployment and O&M of cloud computing with virtualization technology.                    | 2020 |
| <b>Cloud Service</b>        | <b>HCIA - Cloud Service</b> from <b>Huawei</b> , have mastered cutting-edge knowledge and skills of public cloud and are proficient in using Huawei cloud service products. | 2020 |
| <b>Artificial Int. (AI)</b> | <b>HCIA - AI</b> from <b>Huawei</b> . Capable of using AI, ML/DL and other technologies to achieve the design, development and innovation of AI products and solutions.     | 2020 |

## TECHNICAL SKILLS

|                   |  |
|-------------------|--|
| <b>ML/AI</b>      | <b>Tensorflow</b> .  |
| <b>IoT</b>        | Worked in projects using <b>Arduino</b> and <b>NodeMCU</b> .   |
| <b>PL</b>         | Experienced in projects using <b>Arduino IDE</b> , <b>C</b> , <b>Python</b> , <b>Haskell</b> , and <b>Go</b> . |
| <b>Database</b>   | Familiar with <b>Hive</b> and <b>MySQL</b> .   |
| <b>DevOps</b>     | <b>Huawei-Cloud</b> , <b>Kubernetes</b> , <b>Docker</b> , <b>OpenAirInterface</b> , and <b>Mosaic5G</b> .      |
| <b>Networking</b> | <b>Routing &amp; Switching</b> and <b>Cloud Computing</b> .  |

I declare the details stated to be true and complete.  
(CV updated on March 10, 2021)