

Ahmad Suaif

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WORK EXPERIENCE

Aug 2020 - present

Lecturer

Institut Teknologi Sumatera

I am a lecturer for Engineering Physics of Institut Teknologi Sumatera. My specialization are in Physical Systems, especially in sending sensor data to cloud and the computing. Among the subjects I teach are:

1. Matematika dan Komputasi Teknik I & II
2. Pengantar Komputer & Software I & II
3. Industrial Internet of Things
4. Pemrograman Komputer
5. Sains Data Rekayasa
6. Komputasi Cerdas

Jan 2019 - Jan 2020

Lecturer

Politeknik Transportasi Sungai, Danau dan Penyeberangan Palembang

As a lecturer, I teach Applied Physics to higher education students of Nautical Science, theoretically in class and practically in laboratories. I also monitor their progress by pre-tests, post-tests, and the examinations. All the materials that I present on class are based on IMO 7.04 and STCW 2010. To demonstrate my professional acknowledgment, I was joining in IMO MC 6.09 Training of Trainer for Seafarers. My additional jobs include making curriculum draft, RPP & RPS and involving in training event of basic welding and crew skills.

Jul 2017 - Aug 2017

Intern

Center of Excellence in Glass Technology and Materials Science - Thailand

I did a research about laser glass medium based on barium boro-tellurite glass doping with rare earth ions (Sm³⁺, Eu³⁺, & Dy³⁺). This research conducted because the collaboration of my supervisor on Physics Department of ITB, Prof. Dr.-Ing. Mitra Djamal, and Director of CEGM NPRU - Thailand, Prof. Jakrapong Kaewkhao. The result of this internship program was a paper joining in MRS Chiang Mai 2017, accepted in Materials Today: Proceedings.

Dec 2014 - Mar 2015

Intern

Research Center for Physics - Indonesian Institute of Sciences

Under supervision of a researcher of P2F LIPI (Wildan Panji Tresna, M.T.), I did two research in LIPI, one for my practical work and other for my final project,

VOLUNTEER

Bangkit Academy

I became an instructor, contributor, and mentor in the Bangkit and also act as an advisor, especially in machine learning field. The students created project with teams consist of the Android Team, the Machine Learning Team, and the Cloud Computing Team.

- Bangkit Academy 2023 - Instructor
- Bangkit Academy 2022 - Contributor
- Bangkit Academy 2021 - Mentor & Advisor

PATENTS

HKI

EC002022108338 - Teknologi Sensor Bidang Pertanian
EC002022105307 - Internet of Things For Future Agriculture
EC002022105292 - How To Using Amazon Web Services (AWS) For Smart Fertilization System
EC00202288122 - Embedded System For Smart Farming System
EC00202287795 - Smart Fertilization System

EDUCATION

Aug 2016 - Jul 2018

Physics

Institut Teknologi Bandung (Bandung Institute of Technology)

Cum Laude (3.82 of 4.00) | Theoretical High Energy Physics and Instrumentation

Aug 2011 - Jun 2015

Physics

Universitas Sriwijaya (Sriwijaya University)

Cum Laude (3.57 of 4.00) | Theoretical Physics and Materials Science

SKILLS

- Teaching
- Scientific Research
- Spectroscopy
- The MathWorks MATLAB
- Microcontroller (Arduino)
- PLCSIM & TIA Portal
- Cisco Packer Tracer
- Multisim
- C++
- JavaScript
- HTML / CSS
- OriginPro
- Tableau
- Python

SEMINARS AND TRAININGS

Aug 2023	In House Training (IHT) - Pengembangan Kemampuan Analitika Data As Trainer Teknik Industri - Universitas Trisakti
Aug 2021	Pelatihan Dasar IoT - Simple Smart Home Automation As Trainer Teknik Fisika - Institut Teknologi Sumatera)
Aug 2018	7th Asian Physics Symposium As Presenter Department of Physics - ITB
Mar 2018	Seminar Sinergi Pengembangan Teknologi Pertahanan dan Keamanan Resimen Mahasiswa ITB
Nov 2017	Seminar Kriptografi dan Teori Koding Kelompok Keahlian Aljabar Fakultas Matematika dan Ilmu Pengetahuan Alam - ITB
Oct 2017	Workshop on Roles of Instrumentation, Control and Automation in Industry 4.0 Instrumentation and Control Research Group, Faculty of Industrial Technology - ITB
Jul 2017	Symposium Nasional Inovasi dan Pembelajaran Sains 2017 As Presenter FMIPA ITB
Apr 2017	Learn to Make Android Apps Makers Institute
Dec 2016	Seminar Kontribusi Fisika 2016 As Author Prodi Fisika ITB
Nov 2016	Workshop Energi Technocity Himpunan Mahasiswa Teknik Fisika ITB
Sep 2016	Lokakarya Ilmiah Nasional Aplikasi Optik dan Fotonik 2016 As Presenter Kelompok Penelitian Laser Pusat Penelitian Fisika (P2F) - Lembaga Ilmu Pengetahuan Indonesia (LIPI)
Jun 2015	Lokakarya Ilmiah Nasional Aplikasi Optik dan Fotonik 2015 As Presenter Kelompok Penelitian Laser Pusat Penelitian Fisika (P2F) - Lembaga Ilmu Pengetahuan Indonesia (LIPI)
May 2014	Nanosains untuk Kemajuan Teknologi Indonesia di Masa yang Akan Datang As Committe Nano Club Fisika

TEST SCORES

Sep 2018	TOEFL ITP Result: 563
Jun 2016	TPA Bappenas Result: 612.33
Jun 2018	ELPT - ITB Result: 139

AWARDS AND ACHIEVEMENTS

Aug 2016	Awardee of BPPI LPDP Ministry of Finance - Indonesia
Aug 2011	Awardee of Bidik Misi Ministry of Education and Culture - Indonesia

PROJECTS

Aug 2017 - Apr 2019	Calculation of the binding energy of the lithium nucleus with the yukawa potential and the hellmann potential using WKB approximation Author
Jul 2017 - Jan 2019	A Comparative study of TeO₂ concentration on zinc barium boro-tellurite glass doped with Sm³⁺ Author
Jan 2017 - Jul 2017	Sistem Monitoring Sedimentasi Layang Sungai Cikapundung Berbasis Wireless System Menggunakan Spektroskopi Infrared Author
Aug 2016 - Dec 2017	Rancang Bangun Sistem Monitoring Aliran dan Harga Penggunaan Air PDAM menggunakan Arduino dan LabVIEW Author
	Pembangkitan Tunable Gelombang Mikro Dengan Fiber Bragg Grating Menggunakan Laser Dioda Author
Jan 2015 - Sep 2016	Rancang Bangun Sensor Fiber Optik dengan Laser Dioda Author
Jan 2015 - Jun 2015	Komputasi Fisika 3: Simulasi dan Visualisasi Fisika dengan JavaScript Author
Jan 2017 - May 2017	In this project, using JavaScript, HTML & CSS, I worked with the team on the topic in Chapter 7: "Simulation of Reflectance, Transmittance, and Absorbance of EM Wave through N medium.