

ABU UBAIDAH AMIR BIN AB MAALEK

 [ubAI6689](#) |  [linkedin](#) |  fiziksis66@gmail.com |  +601123560027

SUMMARY

A technical professional with a strong foundation in Physics and demonstrated expertise in both research and industry applications, I bring a unique combination of particle physics research experience and practical system development skills. Currently working remotely as Weather Forecast Operational Support at Akirakan Marine Technology, I manage operational support and system maintenance for marine weather forecasting applications, while actively engaging in R&D for new weather-related products and services. This remote role has honed my ability to work independently and efficiently while maintaining effective communication with team members and clients across different locations. In this position, I've developed expertise in handling mission-critical systems and managing large-scale report distribution serving major oil and gas industry clients. My previous work at CERN and the National Centre for Particle Physics (NCP) involved direct contributions to international collaborations including the CMS and Belle 2 experiments, where I gained valuable experience with particle detection systems and physics analysis frameworks. During my time at CERN's BRIL group, I worked specifically on signal detection in beam monitoring systems, developing practical skills in experimental physics data analysis. This comprehensive background in physics research, combined with my proven ability to manage complex technical systems and work in collaborative environments, positions me well for returning to particle physics research. I offer strong analytical capabilities, experience in international research settings, and a demonstrated ability to quickly master new technical systems and analysis tools. My career path demonstrates both technical versatility and a consistent interest in physics research, making me particularly suited for roles that combine advanced physics with practical implementation.

WORK EXPERIENCE

Akirakan Marine Technology Sdn. Bhd. (Operational Support)

Feb 2024 - present

- Technical operational support for marine weather forecast and warning system servicing mainly oil and gas clients (e.g. Petronas, Sapura, T7 Global, etc).
- Maintaining our system (Django weather forecast web application) that is utilized by our weather forecasters.
- Communicating with clients in setting up new weather forecast locations and managing up to 1 million email weather forecast and warning report distribution per month.
- Continuous R&D to produce more (marine) weather forecast related product and services (e.g. seasonal forecast system, tropical storm tracker, tidal table generator, etc).
- Developing and maintaining APIs for seamless integration with client systems and third-party weather data providers.
- Conducting regular system audits and performance optimization to ensure 24/7 availability of weather services.
- Collaborating with meteorologists to enhance forecast visualization tools and improve data presentation for client reports.
- Leading documentation efforts for standard operating procedures and technical specifications for weather forecast products.

Atlas Informatics PLT (Freelance IT Engineer)

Aug 2022 - Jan 2024

- Actively involve in the development and integration of the National Flood and Forecast Warning System (NaFFWS) for the Department of Irrigation and Drainage (JPS) Malaysia.
- Developing the operational dissemination (ODP) platform of MyIBF (Malaysia Impact Based Forecast) system for JPS.
- Assisting the Department of Agriculture (DoA) to build a website and API(s) for an evapotranspiration calculator application.
- Assisted during the 2022 MTL (Monsoon Timur Laut) operation, a yearly 24/7 operation run by JPS to monitor nationwide flood, especially on the east coast of the Semenanjung.
- Part of the maintenance team for the National Flood Forecasting and Warning System (NaFFWS) Legacy System servicing the Department of Irrigation and Drainage.

National Centre for Particle Physics, UM (Project Officer)

Mar 2019 - Mar 2021

- Responsible for the administrative aspect of the Centre. Managing grants and fundings. Conducting events (e.g. outreach, exhibition, short course, etc) for the Centre.
- Contact person for the international counterparts of NCPP from various particle physics institutions around the globe (e.g. CERN (Switzerland), KEK (Japan), DESY (Germany))
- MSc candidate for the centre involved with the Belle2 and CMS experiments.

Perunding Iltizam Sdn Bhd (Control Room Engineer)

Oct 2017 - Oct 2018

- Operator for the National Flood Forecast and Warning System (NaFFWS) stationed at the Department of Irrigation and Drainage (JPS) Ampang.
- Conducting daily monitoring and reporting to ensure the system was up and running.
- Softwares: InfoWorks ICM, Oracle VirtualBox, Linux OS.

CERN, Switzerland (Intern)

Jun 2017 - Aug 2017

- Physics intern in the Beam, Radiation, Illumination, and Luminosity (BRIL) group of CMS, CERN.
- Project title: Finding Multiple Peaks Signal in Fast Beam Conditions Monitor (BCM1F)

National Centre for Particle Physics, UM (Research Assistant)

Nov 2016 - Feb 2017

- Involved in particle physics researches in collaboration with the Belle2 experiment (KEK, Tsukuba, Japan)
- Installed and configured the Belle II Analysis Software Framework (BASF2) in the University of Malaya's DICC servers and local machines.
- Running simulation for the study of angular analysis of the production of B-meson at Belle2.

EDUCATION

2010 - 2015 BSc (Physics) at **University of Malaya**2007 - 2008 Life Science Foundation at **Pusat Asasi Sains, UM**2002 -2006 SPM at **Sekolah Menengah Sains Tengku Muhammad Faris Petra**

SKILLS

Programming Languages	C++, Python, JavaScript
Data Analysis	ROOT (C++), Pandas, Numpy, Matplotlib, Scikit-learn, Jupyter Notebook
Scheduler	Cron, Rundeck
Virtualization	Docker, VirtualBox
Back-end	Django
Dashboarding	Grafana, Prometheus
Version Control	Git, GitHub, GitLab
Database	MySQL, MongoDB, InfluxDB
Image Processing	OpenCV
Remote Access	SSH, RDP
Operating System	Linux, Windows
Code Editor	VS Code, VIM, Nano
AI Tools	ChatGPT, Claude, DeepSeek, Cursor