



Riksa Suganda

Sukanegara 44
Bandung
Indonesia
40291

Mobile : +6281315462283
Email : riksa171290@gmail.com
LinkedIn : [linkedin.com/in/riksasuganda](https://www.linkedin.com/in/riksasuganda)
Skype : riksawisudya

About

Graduated from MSc of Subsea Engineering at the University of Aberdeen, and BSc of Engineering Physics from Bandung Institute of Technology.

Have a strong engineering background, mainly the principles of engineering mechanics & electrical which consists of numerical simulation method using computational fluid dynamics (CFD) in fluid mechanics projects and instrumentation & control in energy facilities projects.

In cumulative, I have around 7 years of working experience in oil & gas industry. At my last job, I was working as an instrument & electrical project construction engineer at Pertamina Exploration & Production Division, an Indonesian O&G company taking on construction projects of oil & gas surface facilities.

All in all, I have a solid intention to have a career in energy or technology sectors.

Education

University of Aberdeen, MSc Subsea Engineering, (2.2) 3.0/4.0, 2015 – 2016

Awarded a full scholarship from Indonesia Endowment Fund for Education (LPDP)

Courses include: Subsea Production System, Subsea Integrity, Subsea Control, Flow Assurance, Riser & Hydrodynamics, Subsea Construction-Inspection & Maintenance, Engineering Risk & Reliability Analysis and Pipeline & Soil Mechanics

Dissertation: Sand Erosion Modelling on Two Elbow Gas Pipeline. Designed and performed the simulation of sand erosion that occurred at two pipeline elbow using STAR CCM+ computational fluid dynamic software.

Bandung Institute of Technology, BSc Engineering Physics (2.1) 3.25/4.0, 2008-2013

Degree accredited by the Accreditation Board for Engineering and Technology (ABET)

Courses include: Fluid Mechanics, Thermodynamics, Mechanics of Material, Physics of Material, Heat & Mass Transfer, Wave Phenomena, Energy System & Conversion, System Dynamic & Simulation, Measurement & Control, Electric Circuit & Electronics

Research Project: Analysis of Flue Gas Flow on Circulating Fluidized Bed Boiler Using Computational Fluid Dynamics Method. Designed and conducted the simulation of flue gas flow on CFB Boiler using ANSYS CFX computational fluid dynamic software. Being published in ANSYS Hall of Fame 2017 as one of runner up finalists.

Business Plan Project: Conducting a research of biomass generator including the development of the technology, the way it works, the specification, and investment planning to build it as a start-up business in renewable energy. All of those aspects were presented in a proposal submitted at business plan competition held by School Business Management ITB. My group has reached the final as one of five finalists in the competition.

Achievement at Work

First Line Manager, Nestle, Indonesia **Nov 2020 – Dec 2022**

Responsible to deliver the shift and line objectives by empowering and engage people to develop their capability. Ensure line (shift) production plan is fully achieved on time and in compliance with internal and external requirements.

Instrument & Electrical Project Engineer, Pertamina EP, Indonesia **Jan 2019 – Oct 2019**

Having successfully managed several on-going construction projects in onshore oil & gas surface facilities that happened simultaneously in timely manner.

Instrument Engineer, Pertamina Offshore North West Java, Indonesia **May 2018 – Dec 2018**

Successfully integrate new retrofit design of instrumentation devices, routes and valves at processing equipments on several offshore platforms due to the increasing production capacity.

Supervisor Instrument & Control Maintenance, Pertamina Geothermal Energy, Indonesia **May 2017 – Apr 2018**

Operating the first geothermal power plant at Lampung province in Indonesia which is based on the standard system in New Zealand. Successfully managed to execute the first year inspection of power plant that states the continual production for one year long.

Master Thesis Project, Norton Straw Consultant, Aberdeen, UK **June 2016 – Aug 2016**

Producing a better design of pipeline bends with a certain shape and bend radius that can sustain the sand erosion impact on the inner surface of the pipeline.

Instrument Engineer, JFE, Indonesia **Feb 2014 – May 2015**

Have been engaged in two FEED projects and a retrofitting project. Those two FEED projects are about pipeline and fuel terminal construction respectively. Also got involved in a project of retrofitting the system routing of an offshore platform.

Skill

SURF Engineering (Flexcom, Orcalflex, Pipesim)	Beginner
Computation Fluid Dynamics (ANSYS, StarCCM+)	Intermediate
Instrumentation Engineering (Instrucalc)	Intermediate

Language

Bahasa (Native) , English (Fluent) , Dutch (Beginner)

Professional Memberships

- Student Member of the Society of Petroleum Engineer (SPE AberdeenChapter)
- Student Member of the Society for Underwater Technology (SUT)
- Student Member of the Institute of Marine Engineering, Science and Technology (IMarEST)

Work-Related Projects

Construction of Onshore Oil Surface Facilities at Pertamina EP, Indonesia **Jan 2019 - Oct 2019**

Having responsibility to supervise construction job in several fields of oil & gas at the same time. Producing reports using MS Excel relating to the construction job progress in daily and weekly manner. Reviewing and correcting the documents from contractors and vendors who take part in the projects. Successfully managing projects that progress in parallel from several contractors in terms of the schedule and operational procedure for them to follow.

Construction and Retrofitting of Offshore Platform at Pertamina, Indonesia **May 2018 – Dec 2018**

Being placed in Management of Change team in engineering & integrity department. Responsible to do the design retrofit for equipment in several offshore platforms to accommodate the increasing of wells production capacity. Involved in designing the instrumentation devices that are to be installed on the modified section of the field equipment (tank separator, riser column, wellhead) on the platform. Actively coordinating with purchasing department & maintenance department to determine the instrument specification. Producing engineering documents such as datasheets, Request for Quotation, and Technical Bid Evaluation documents for tendering.

Maintenance Program at 4 X 55 MW Geothermal Power Plant at Pertamina, Indonesia **May 2017 – Apr 2018**

Making maintenance plan for daily, weekly, and monthly period that will be executed by technicians. Supervising a team consisted of five technicians on the field whose job is to execute the maintenance activity and troubleshooting. Making maintenance schedule for instrument & control equipment that needs to be repaired or checked. Supervising First Year Inspection of geothermal power plant and liaising with vendor and contractor. Acting as owner representative of the power plant who is responsible to make sure all the procedure are taken care as per schedule by the vendor and contractor. Acting as medium between the maintenance manager and the third parties.

Analysis of Erosion Modeling on Gas Pipeline Bends using StarCCM+ at Norton Straw, UK Jun 2016 - Aug 2016

I was engaged as an intern in collaboration with the consultant company which specialized in Computational Fluid Dynamics analysis. This project is about how to make appropriate design of the elbow of subsea gas pipeline due to sand erosion phenomena that occurred on it. This simulation is conducted using StarCCM+ in multiphase and turbulent flow that consisted of gas fluid and solid sand particles. There is a comparison between the S-bend & U bend with a certain degree of bending.

Calculation of Steel Catenary Riser using Analytical Method and Flexcom at UoA, Aberdeen Mar 2016 - Jun 2016

This project is about the challenge to design and testing a static and dynamic subsea riser model and compare the results with analytical results that are also calculated. Parameter such as the sag bend elevation, effective tension, curvature and hang off angle thus will be compared from each calculation. In the dynamic system we will apply an offset, current and wave and then compare the curvature and tension to allowable curvature and tension. The riser system comprised of a 6" gas pipe and a 10" oil pipe. The flexible pipes were held at 45m off the seabed by a mid-water arch (MWA) and the FPSO was located 115m above the seabed and 144m offset to the touchdown point.

Calculation of Sling Length on Rigging Arrangement at UoA, Aberdeen Nov 2015 - Dec 2015

To perform a calculation of rigging structure for installing a subsea manifold. Several factors such as design weight of rigging, sling angle and length, vertical load distribution at manifold lifting points, sling tension, hook distance, sling and shackle selection, and rigging oscillation were analysed and computed.

Project Technical Evaluation - Subsea Tie-Back with Subsea Gas Compression, Aberdeen Nov 2015 – Dec 2015

Performing a study and prepare a briefing report for installing a subsea gas compression at Ormen Lange and subsea tie-back on Asterix field to Aasta Hansteen topside facility. This report included:

- Executive Summary
- Overview of industry experience of subsea tie back of gas wells.
- Overview of subsea compression technology.
- Overview of expected subsea hardware that will be required to complete this subsea tie back using subsea gas compression including description of key equipment along with justification for the assumptions that have been used.
- Risk Report, including a detailed project-specific risk register with supporting commentary.
- Summary and recommendations

Spool Metrology Measurement and Calculaton on Starling Field at UoA, Aberdeen Oct 2015 – Nov 2015

Performing the spool metrology calculation using acoustic positioning and instrument measurement tools. The project goal is to design and calculate the gap filling spool between two existing point of reference. Parameters such as flang headings, spool distance, and flange height are taken into account when it comes to calculation. The calculation result is to be double-checked with the values measured by the gyrocompass. This project is located on Starling Field.

FEED Pipeline CY-III and CB-III - PT Pertamina, Indonesia Dec 2014 – May 2015

Responsibility - Preparing FEED documents as per code standard (ASME, ASTM, API, ISA etc) :

- Datasheet : Pig Signaller, Leak Detector, Densitometer, Colour Meter, SCADA, MOV
- General specification : SCADA, Terminal Automation System (TAS)
- Instrument Calculation : Control valve, Pressure safety valve
- List and Schedule : Instrument Index, Instrument I/O List
- Material Take Off : MTO for Instrument Cable & Accessories, MTO for Instrument Bulk Material, MTO for Junction Box

Project FEED Construction of Fuel Terminal and Pipeline PT. Pertamina, Indonesia Dec 2014 – May 2015

Responsibility - Preparing FEED documents as per code standard (ASME, ASTM, API, ISA etc) :

- Datasheet : Densitometer, Restriction Orifice, Dew Point Transmitter, Turbine Meter, Level Transmitter (ATG Servo & Radar type), Flow Transmitter (Positive Displacement type), Pig Signaller, Motor Operated Valves
- General specification : General Instruments for Measurement and Control, Terminal Automation System (TAS)
- MTO : Instrument Cable & Accessories, Instrument Bulk Material, Junction Box
- Instrument Calculation : Restriction orifice, Control valve, Pressure safety valve
- List and Schedule : Instrument Index, Instrument I/O List

Retrofitting of F&G & ESD System on FOXTROT Platform PHE ONWJ, Indonesia**Feb 2014 – Jan 2015**

Got engaged in a project of F&G and ESD detector replacement in FOXTROT Platform, owned by PHE ONWJ. Having responsibility of system rerouting from pneumatic to electrical configuration.

- Got involved in producing some FEED documents such as :
- Datasheet : Datasheet for arrays of F&G detector (Infrared Gas Detector, Photoelectric Smoke Detector, High Sensitivity Smoke Detector, Ultraviolet Smoke Detector, Heat Detector etc.), Datasheet for Instrument Cable (Fiber Optic, Heat Resistant, Flame Retardant), Datasheet for Instrument Panel (ESD Panel, P/I Panel, CCTV Panel), Datasheet for CCTV
- List: Instrument Index, I/O List, Instrument Cable List
- MTO : MTO for Fire & Gas System, MTO for Field Instrument, MTO for Cable
- Calculation : Power Consumption Calculation

Simulation and 3D Model Design of CFB Boiler Ducting ALSTOM Power, Indonesia**Jan 2013 – Mar 2013**

Senior Design Project:

With title: Analysis of Flue Gas Flow on Circulating Fluidized Bed Boiler Using Fluid Dynamics Computation Method

- Completed senior project at ALSTOM Power Company, an EPC Company in Power Generator Industry
- Assisted engineering department in designing flow simulation of flue gas pipe used in boiler power generator
- Created models using Sketch Up and SolidWorks and participated in cross functional product development meetings
- Contributed to the change in handling design that is expected to improve laminarity of the fluid's flow and segregating multiphase flow into two separated phases using ANSYS Fluent, ICEM, and CFX software

Home Scale Biomass Generator Business Plan, Indonesia**Jan 2012 – Feb 2012**

Conducting a research of biomass generator including the development of the technology, the way it works, the specification, and investment planning to build it as a start-up business in renewable energy. All of those aspects were presented in a proposal submitted at business plan competition held by School Business Management ITB

Additional Work Experience

Volunteer, Free Medical Treatment Program**Oct 2011 – Nov 2011**

This event was a part of Engineering Physics Technology Festival event. My job as head of facility division was to manage leasing facilities used in the main event and to delegate the task to my division member on how to execute the plan on the day of the event commenced.

Interests & Hobbies

Music Event Organizer: I have been involved in doing art decoration for music event during my school time. I was a member of construction division who built the mascot and big statue as the event icon.

Reading: I enjoy reading about future engineering concept book as I idolize Elon Musk and Steve Jobs as two visionaries whom I admire for their ability to think into the future.



UNIVERSITY OF ABERDEEN

By authority of the Senatus Academicus
the Degree of

Master of Science

SUBSEA ENGINEERING

was conferred upon

RIKSA WISUDYA ACHMADSYAH SUGANDA

on 26 November 2016

Principal & Vice-Chancellor

University Secretary



UNIVERSITY
OF ABERDEEN

Registry
King's College
Aberdeen AB24 3FX
Scotland
United Kingdom

From: Postgraduate & Fees Services Team
Tel No: +44 (0)1224 273505
e-mail: postgraduate@abdn.ac.uk

24 October 2016

To Whom It May Concern

Riksa Wisudya Achmadsyah Suganda
Date of Birth: 17 December 1990
Degree of Master of Science in Subsea Engineering

This letter is to certify that the above-named student has satisfied all the requirements for the Degree of Master of Science in Subsea Engineering and is eligible to graduate.

Riksa Wisudya's period of Study commenced 07 September 2015 and ended on 20 September 2016.

Mr Robert Findlay
Administrative Officer (Postgraduate)





UNIVERSITY OF ABERDEEN

Telephone 01224 273580 Fax 01224 272050 Email: studentrecords@abdn.ac.uk

PLEASE KEEP THIS DOCUMENT SAFELY - IT CANNOT BE EASILY REPLACED

STUDENT TRANSCRIPT

Name: SUGANDA

RIKSA WISUDYA ACHMADSYAH

Date of Birth: 17 DEC 1990


Student Id Number: 51553382
 UK Higher Education Unique Student Identifier: 1511701674252
 Programme Of Study: DEGREE OF MASTER OF SCIENCE IN SUBSEA ENGINEERING
 Period(s) of Registration: 07 SEP 2015 - 15 SEP 2016
 Date of Graduation: 26 NOV 2016
 Classification:

Session	Course Code	Credit Value	Course Title	Aberdeen Grade	Merit Certificate
2015	EG50F6	15	SUBSEA CONTROL	B1	2ND CLASS
2015	EG50F8	15	SUBSEA INTEGRITY	D1	
2015	EG50F9	15	SUBSEA PRODUCTION SYSTEMS	B2	2ND CLASS
2015	EG50T7	15	SUBSEA CONSTRUCTION, INSPECTION AND MAINTENANCE	A5	1ST CLASS
2015	EG55F2	15	PIPELINES AND SOIL MECHANICS	C3	
2015	EG55F6	15	RISERS SYSTEMS AND HYDRODYNAMICS	D1	
2015	EG55F8	15	FLOW ASSURANCE	D3	
2015	EG55P6	15	ENGINEERING RISK AND RELIABILITY ANALYSIS	D3	
2015	EG59F9	60	INDIVIDUAL PROJECT	C1	

Additional Information

Additional recognised activities not formally accredited by the University

Year	Description
2015	CAREER MENTORING PROGRAMME

Signed: 
 Academic Registrar
 Dr Gillian Mackintosh



Institut Teknologi Bandung

AA 029531

Number : 133033/II.A/PP/VII/IJZ/1/2013

herewith certifies that

Riksa Wisudya Achmadsyah Suganda

born in *Bandung* on *December 17, 1990*

Academic year of entry *2008/2009*

Student Registration Number *13308086*



has successfully completed the requirements of Undergraduate Program of

Engineering Physics

on *May 2, 2013*

and hereby granted the degree of

Bachelor of Science

with all of the rights and responsibilities inherent therein.

Issued in Bandung on *July 13, 2013*



Dean
Faculty of Industrial Technology,

Rector,

Signed

Signed

Prof. Ir. Hermawan K. Dipojono, MSEE., Ph.D.

Prof. Akhmaloka, Ph.D.

OFFICIAL TRANSLATION

No. 270/II.C/PP/2014

Issued in Bandung on February 24, 2014

Authorized Signature :

Prof. Ir. Bermawi P. Iskandar, M.Sc., Ph.D
Dean of Faculty of Industrial Technology

This certificate is issued based on the Decree of the Rector No. : *173/SK/II.A/PP.3.5.1/2013*



INSTITUT TEKNOLOGI BANDUNG

FACULTY OF INDUSTRIAL TECHNOLOGY

Jalan Ganesha 10 Bandung 40132, Telp: +6222 2504551, Fax +6222 2509406

ACADEMIC TRANSCRIPT

No. : 1027/11.C06.5.3/PP/2013

Student ID : 13308088

Name : Riksa Wisudya A S

Study Program : Engineering Physics

CODE	NAME OF COURSE	CREDIT	GRADE	CODE	NAME OF COURSE	CREDIT	GRADE
First Basic Year							
MA1101	Calculus I	4	BC	MA1201	Calculus II	4	AB
F11101	Physics IA	4	BC	F11201	Physics IIA	4	B
K11101	Chemistry I A	3	AB	K11201	Chemistry II A	3	BC
KU1101	Conceptual of Science	2	A	KU1201	System of Universe	2	BC
KU1073	Introduction to Information Technology C	2	AB	KU1001	Sports	2	B
KU1021	Reading for Academic Purpose	2	B	KU1011	Scientific Writing	2	B
				KU1287	Introduction to Industrial Technology	2	A
Bachelor Grade							
TF2101	Engineering Mathematics I	3	BC	TF2201	Engineering Mathematics II	3	B
TF2102	Probability and Statistics	3	BC	TF2202	Engineering Computation	2	AB
TF2103	Mechanics of Material	2	AB	TF2203	Logic and Digital System	3	A
TF2104	Thermodynamics	3	AB	TF2204	Fluid Mechanics	3	A
TF2105	Electric Circuit and Electronics	4	C	TF2205	Quantum Physics and Nano	3	BC
TF2106	Energy Conversion	2	B	TF2206	Electromagnetic	3	B
TF2107	Engineering Physics Laboratory I	1	A	TF2207	Engineering Physics Laboratory II	1	A
TF3101	System Dynamic and Simulation	2	B	TF3201	Signal Processing	3	A
TF3102	Measurement Methods	3	B	TF3202	Sensor and Actuator	3	BC
TF3103	Wave Phenomena	3	B	TF3203	Automatic Control	3	A
TF3104	Physics of Material	3	B	TF3204	Acoustics	3	B
TF3105	Heat and Mass Transfer	3	A	TF3205	Thermal Analysis	3	B
TF3106	Engineering Physics Laboratory III	1	A	TF3206	Engineering Physics Laboratory IV	1	A
TI4002	Industrial Engineering Management	3	AB	KU2071	Pancasila and Civics	2	A
TF4001	Engineering Ethics and Field Training	2	A	TF4002	Capita Selecta of Engineering Physics	1	A
TF4003	Laser and Fiber Optics	3	A	TF4099	Final Project	5	AB
TF4101	Building Physics	3	B	TF4214	Industrial Instrumentation and Control	3	AB
TK3084	Industrial Waste Treatment	2	B	TF4212	Medical Physics	3	B
KU2061	The Islamic Religion and Ethics	2	AB	TF4213	Energy System	3	AB
TF4113	Digital Control	3	A	DK2120	History of Design	2	A
TF4115	Energy Conservation	3	B				
TF4118	Thermal Environmental Engineering	3	AB				

The total credits is 146 and the Grade Point Average is 3.25

Grade point average is awarded based on the following : A = 4, AB = 3.5, B = 3, BC = 2.5, C = 2, D = 1



Bandung, May 15, 2013
Head of Study Program of
Engineering Physics ITB

[Signature]
Dr. R. Nugroho Spelami, MBEEnv., Ph.D.
NIP. 195512051980031005



Good food, Good life

PT Nestlé Indonesia

5th Floor Wisma Nestlé
Perkantoran Hijau Arkadia
Jl. TB. Simatupang Kav. 88, Jakarta 12520 (Indonesia)
P +62 21 7883 6000

PRIVATE & CONFIDENTIAL

Mr Riksa Wisudya A. Suganda
c/o Karawang Factory

Your Ref:

Our Ref : 042/KWG-HR/mk/HT/II/21

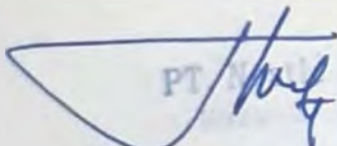
KARAWANG : 15 December 2022

STATEMENT OF EMPLOYMENT

This is to certify that **Mr. RIKSA WISUDYA A. SUGANDA** has been employed by our company as from 01 November 2020 up to 01 December 2022 in the position of First Line Manager, Karawang Factory (**Executive level**) in our Technical Division.

He is leaving his position in our company to personal reason, and we wish him every success in his future endeavor.

Yours sincerely,


PT Nestlé Indonesia
Karawang Factory

Mr Heru Tjahyono
Head of Human Resource Department