

# FULL BIODATA



## IRFAN TAUFIK RAU

### Formal Education

Level	Year	Place
Graduate	2013 – 2014	<b><u>Double Degree:</u></b> <b>Colorado School of Mines, USA</b> <ul style="list-style-type: none"><li>• Master of Science in Mineral and Energy Economics</li><li>• GPA : 4.00 / 4.00</li></ul> <b>IFP-School, France</b> <ul style="list-style-type: none"><li>• Master of Science in Petroleum Economics and Management</li><li>• GPA : 4.00 / 4.00</li></ul>
Undergraduate	2009 – 2013	<b>Institut Teknologi Bandung</b> <ul style="list-style-type: none"><li>• Bachelor of Science in Petroleum Engineering</li><li>• GPA : 3.98 / 4.00</li></ul>
Senior High School	2006 – 2009	<b>SMAN 1</b> – Bogor
Junior High School	2003 – 2006	<b>SMP Bina Insani</b> – Bogor
Elementary School	1998 – 2003	<b>SD Bina Insani</b> – Bogor
Preschool Lessons	1997 – 1998	<b>Daceyville Public School</b> – Sydney, Australia
Kindergarten	1994 – 1997	<b>Pooh Corner Kindergarten</b> – Sydney, Australia

## Working Experiences

Year	Company	Position
2023 – Present	PT Pertamina (Persero)	Sr Analyst Group Strategic Planning
	<ul style="list-style-type: none"> <li>Develop comprehensive corporate strategies in line with market dynamics and business objectives for Pertamina.</li> <li>Facilitate seamless collaboration among Subholding entities, fostering cohesive strategic alignment.</li> <li>Evaluate the execution of long-term plans and strategic milestones, providing insightful recommendations for timely adjustments.</li> </ul>	
2021 – 2023	PT Pertamina Hulu Energi	Sr Analyst D&P Planning & Evaluation
	<ul style="list-style-type: none"> <li>Establish a standardized business process and work practices of field development for all business units within Subholding Upstream.</li> <li>Ensure that all incoming field development project proposals meet technical, commercial and economical quality standards</li> <li>Manage upstream projects portfolio at pre-execution phase and ensure projects maturation milestones are completed in a timely manner.</li> </ul>	
2020 – 2021	PT Pertamina Hulu Mahakam	Petroleum Economist
	<ul style="list-style-type: none"> <li>Build and improve Mahakam PSC's economic model.</li> <li>Coordinate with various entities to yield reliable technical, legal, and commercial data as economic inputs.</li> <li>Perform project-level &amp; block-level economic evaluations and communicate the results with stakeholders.</li> </ul>	
2018 – 2020	PT Pertamina Hulu Mahakam	Reservoir Engineer
	<ul style="list-style-type: none"> <li>Develop new statistical method to estimate new well reserves for the sanction of Handil South and Handil Phase 7 POD</li> <li>Optimize the production of Handil Field together with well intervention and well performance teams.</li> <li>Task Force Member of Handil Enhanced Oil Recovery (EOR) Project.</li> <li>Develop automatic reserves estimation tool in geomodel for Tunu Field in collaboration with geologists.</li> <li>Develop artificial intelligence to estimate perforation gain in Tunu Field.</li> <li>Proposed 42 new wells for Tunu Field in collaboration with geophysicists and geologists.</li> </ul>	
2015 – 2017	Total E&P Indonesia	Reservoir Engineer
	<ul style="list-style-type: none"> <li>Carry out and develop toolbox for Tunu well intensive review project.</li> <li>Collaborate with geophysicists and geologists in optimizing the location of new Tunu Main Zone wells. Highly involved in the sanction of Tunu Main Zone's first seismic driven well.</li> <li>Coordinate with well intervention division and well performance team to optimize and monitor the production of Peciko Field.</li> </ul>	
May – Aug 2012	Chevron Indonesia Company	Drilling & Completion Team Intern

## Organizational Experiences

Year	Organization	Position
2023 - Present	Student Chapter Liaison – Society of Petroleum Engineers (SPE) Java Section	Board Member
2019 - 2021	Ikatan Ahli Teknik Perminyakan Indonesia (Indonesian Association of Petroleum Experts) Commissariat of Central & Eastern Indonesia	Chairperson
2019 – 2021	RECON (Reservoir Engineers Collaborative Network)	Vice Chairman
2017 - 2021	Young Professional – Society of Petroleum Engineers (SPE) Balikpapan Section	Chairperson
2018 - 2019	Ikatan Ahli Teknik Perminyakan Indonesia (Indonesian Association of Petroleum Experts) Commissariat of Central & Eastern Indonesia	Secretary General
2016 – 2017	Scholarship Division – Society of Petroleum Engineers (SPE) Balikpapan Section	Staff
2012 – 2013	Internal Department – IATMI SM ITB	Chief
2012 – 2013	Arts and Ceremonial Division – HMTM Patra ITB	Staff
2011 – 2012	Kinship Division – Apres! ITB (Music Appreciation Unit)	Chief
2011 – 2012	Arts and Sports Division – HMTM Patra ITB	Staff
2010 – 2011	Arts and Ceremonial Division – HMTM Patra ITB	Staff
2010 – 2011	Kinship Division – Apres! ITB (Music Appreciation Unit)	Staff
2009 – 2010	Music Division – Apres! ITB (Music Appreciation Unit)	Staff
2007 – 2008	Diafragma (Music Extracurricular in SMAN 1 Bogor)	Training Coordinator
2007 – 2008	International Network Division – eASY (english Association for SMANSA Youth)	Staff
2007 – 2008	Physics Division – Scientific Creation for SMANSA Youth	Chief Coordinator

2006 - 2007	Physics Division – Scientific Creation for SMANSA Youth	Coordinator
2004 - 2005	Student Government of Bina Insani Junior High School, Bogor	Class Deliberation Committee
2003 -2004	Subservience to The Almighty God Division – Student Government of Bina Insani Junior High School, Bogor	Staff

## Committee Experiences

Year	Committee
2022 - 2023	Student Paper Contest Co-Chairman – SPE Asia Pacific Oil & Gas Conference and Exhibition (APOGCE) 2023
2019	Project Chairman – Central & Eastern Indonesia Petroleum Summit 2019
2017 - 2019	Publication & Knowledge Management – RECON (Reservoir Engineers Collaborative Network)
2017	Publication – Total Olympic 2017
2016	Chairman of Total E&P Indonesia Silaturahmi 2016
2016	Co-Project Manager of T-REX (Tunu Retour d'Experience) Run
2011 – 2012	Vice Manager of Production Division – ITB Fair 2012
2011	Trainer of Discipline Division, ProKM ITB 2011
2011	Staff of Logistics Division, Patra Golf Tournament
2011	Chief of Logistics Division – “4 in 1” FTTM 2011
2011	Staff of Agenda and Logistics Division – MPAB HMTM Patra 2011
2010 – 2011	Chief of Field Division, Ganesha Music Event 2011
2010	General Coordinator of Familiarity Night by Faculty of Mining and Petroleum Engineering, Bandung Institute of Technology
2010	Member of 1 <sup>st</sup> Squad Discipline Division (Varunastra), INKM ITB 2010
2010	Staff of Publication Division, Ganesha Music Event 2010
2009 – 2010	Member of The Security Division, ITB Fair 2010
2009	Staff of Publication Division – Caption (Capres in Action)

## Achievements

### ➤ *Academic*

- Summa Cum Laude (GPA 4.00) Graduate of Colorado School of Mines with Master of Science Degree in Mineral and Energy Economics – 2014
  - Summa Cum Laude (GPA 4.00) Graduate of IFP-School with Master of Science Degree in Petroleum Economics and Management – 2014
  - Dean's List Award for Outstanding Academic Achievement (GPA 4.00) at the Undergraduate Program, Second Semester – 2012/2013
  - Dean's List Award for Outstanding Academic Achievement (GPA 4.00) at the Undergraduate Program, First Semester – 2012/2013
  - Dean's List Award for Outstanding Academic Achievement (GPA 3.93) at the Undergraduate Program, Second Semester – 2011/2012
  - Dean's List Award for Outstanding Academic Achievement (GPA 3.93) at the Undergraduate Program, First Semester – 2011/2012
  - Dean's List Award for Outstanding Academic Achievement (GPA 4.00) at the Undergraduate Program, Second Semester – 2010/2011
  - Best Practicant in Petrophysics Laboratory Activities 2011
  - Dean's List Award for Outstanding Academic Achievement (GPA 4.00) at the Undergraduate Program, First Semester – 2010/2011
  - 1st Winner of Physics Research Based Learning Competition 2010
  - Dean's List Award for Outstanding Academic Achievement (GPA 4.00) at the Undergraduate Program, Second Semester – 2009/2010
  - Dean's List Award for Outstanding Academic Achievement (GPA 4.00) at the Undergraduate Program, First Semester – 2009/2010
  - Best Graduate of SMAN 1 Bogor
  - 1st rank in 2nd semester, 12th grade (SBI class), SMAN 1 Bogor
  - 1st rank in 1st semester, 12th grade (SBI class), SMAN 1 Bogor
  - 1st rank in 2nd semester, 11th grade (SBI class), SMAN 1 Bogor
  - 1st rank in 1st semester, 11th grade (SBI class), SMAN 1 Bogor
  - 1st rank in 2nd semester, 10th grade (SBI class), SMAN 1 Bogor
  - 3rd rank in 1st semester, 10th grade (SBI class), SMAN 1 Bogor
  - Best Graduate of SMP Bina Insani Bogor
  - 1st rank in 2nd semester, 3rd grade of Junior High School, SMP Bina Insani Bogor
  - 1st rank in 1st semester, 3rd grade of Junior High School, SMP Bina Insani Bogor
  - 1st rank in 2nd semester, 2nd grade of Junior High School, SMP Bina Insani Bogor
  - 1st rank in 1st semester, 2nd grade of Junior High School, SMP Bina Insani Bogor
  - 1st rank in 2nd semester, 1st grade of Junior High School, SMP Bina Insani Bogor
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- 1st rank in 1st semester, 1st grade of Junior High School, SMP Bina Insani Bogor
- Best Graduate of SD Bina Insani Bogor
- 1st rank in 2nd semester, 6th grade of Elementary School, SD Bina Insani Bogor
- 1st rank in 1st semester, 6th grade of Elementary School, SD Bina Insani Bogor
- 1st rank in 3rd quarter, 5th grade of Elementary School, SD Bina Insani Bogor
- 1st rank in 2nd quarter, 5th grade of Elementary School, SD Bina Insani Bogor
- 1st rank in 1st quarter, 5th grade of Elementary School, SD Bina Insani Bogor
- 1st rank in 3rd quarter, 4th grade of Elementary School, SD Bina Insani Bogor
- 1st rank in 2nd quarter, 4th grade of Elementary School, SD Bina Insani Bogor
- 1st rank in 1st quarter, 4th grade of Elementary School, SD Bina Insani Bogor
- 1st rank in 3rd quarter, 3rd grade of Elementary School, SD Bina Insani Bogor
- 1st rank in 2nd quarter, 3rd grade of Elementary School, SD Bina Insani Bogor
- 1st rank in 1st quarter, 3rd grade of Elementary School, SD Bina Insani Bogor
- 2nd rank in 3rd quarter, 2nd grade of Elementary School, SD Bina Insani Bogor
- 3rd rank in 2nd quarter, 2nd grade of Elementary School, SD Bina Insani Bogor
- 5th rank in 1st quarter, 2nd grade of Elementary School, SD Bina Insani Bogor
- 1st rank in Kindergarten (Academic Proficiency), Daceyville Public School, Sydney

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➤ ***Non-Academic***

- SPE Young Member Outstanding Service Award for South Asia & The Pacific Region, 2020
- Total Group Scholarship, 2013
- 2<sup>nd</sup> Place, Plan of Development Competition at the Oil and Gas Intellectual Parade 2013, Yogyakarta, 2013
- 1st place, Oil Rig Design Competition at International Oil and Gas Symposium 2012, Johor Bahru, Malaysia, 2012
- Winner of Most Valuable Patra at Patra of the Year 2012
- 2nd place, Band Festival – It's Kind of Music 2 : Ethnic at Night, 2011
- Honor Student of West Java, among Senior High School Students, 2008
- Honor Student of Bogor, among Senior High School Students, 2008
- 1st place, Bogor Band Festival, 2008
- 1st consolation prize winner, Jadebotabek Band Festival, 2008
- 1st place, Bogor Band Festival at SONICS, 2008
- 3rd place, Gudang Garam Band Festival, 2008
- 2nd place, Mechatronics (Mechanics and Electronics) Competition at SMA Insan Cendikia Serpong, 2007
- Honor Student of Bogor, among Junior High School Students, 2005
- 1st place, 11-14 years old Men's Team Kata + Bunkai, National Karate Do Championship, 2004
- 2nd place, 11-14 years old Men's Enbu, National Karate Do Championship, 2004

- 3rd place, 14 years old Men's Individual Kata, Traditional Karate Do Championship among Students of West Java and DKI Jakarta Province, 2004
- 1st place, 14 years old Men's Enbu, Traditional Karate Do Championship among Students of West Java and DKI Jakarta Province, 2004
- Received Black Belt (Dan I / Sho Dan) in Traditional Karate Do, 2004
- 1st place, 11-14 years old Men's Team Kata + Bunkai, Traditional Karate Do Championship among Students of Jabotabek Region, 2004
- 2nd place, 11-14 years old Men's Enbu, Traditional Karate Do Championship among Students of Jabotabek Region, 2004
- 1st place, Men's Junior Team Kata, South Borneo Traditional Karate Do Championship, 2003
- 2nd place, Men's Junior Kumite, South Borneo Traditional Karate Do Championship, 2003
- 1st place, Mens' U10 Team Kata, INKAI Karate Championship among Students of Jabotabek Region, 2002
- 1st place, Men's U10 Individual Kumite, INKAI Karate Championship among Students of Jabotabek Region, 2002
- 1st place, Men's U10 Individual Kata, INKAI Karate Championship among Students of Jabotabek Region, 2002
- Participant of Natural Science Experiment held by Orbit Magazine, among Elementary School Students of Jabotabek, 2002
- 1st place, Men's U10 Individual Kumite, Java & Bali ITKF Traditional Karate Do Championship, 2002
- 1st place, Men's U10 Individual Kata, Java & Bali ITKF Traditional Karate Do Championship, 2002
- 2nd place, Men's U10 Team Kata, Java & Bali ITKF Traditional Karate Do Championship, 2002
- 1st place, 10-12 years old Men's Individual Kumite, Bogor INKAI Karate Championship, 2002
- 1st place, 10-12 years old Men's Individual Kata, Bogor INKAI Karate Championship, 2002
- 2nd place, 10-12 years old Men's Team Kata, Bogor INKAI Karate Championship, 2002

## Teaching Experiences

Activities	Year
Laboratory Assistant Coordinator in Drilling Operation Course	2013
Teaching Assistant in Improvement of Oil Recovery Course	2013
Teaching Assistant in Field Plan of Development Course	2013
Teaching Assistant in Transport Phenomena TK3082	2011 - 2012
Teaching Assistant in Basic Thermodynamics TK3081	2011

## Facilitating / Speaking Experiences

Name	Place	Year
<i>Speaker:</i> Oil & Gas Industry 101 – Production Session	Online (organized by IATMI SM UI x SPE UI SC)	2022
<i>Speaker:</i> Understanding the Petroleum Industry & Its Future	Online (organized by SPE ITS SC)	2021
<i>Speaker:</i> Mature Field Development for Indonesia One Million BOPD by 2030	Online (organized by IATMI SM Trisakti)	2021
<i>Spaker:</i> Career Talk – Important Skills for Fresh Graduates to Compete in Oil & Gas Industry	Online (organized by PEM Akamigas)	2021
<i>Speaker:</i> Oil & Gas Economics 101	Online (organized by SPE Universitas Indonesia SC)	2021
<i>Judge:</i> International Plan of Development Competition, Oil & Gas Intellectual Parade (OGIP) 2021	Online (organized by SPE UPN Veteran Yogyakarta SC)	2021
<i>Trainer:</i> Basic Oil & Gas Upstream Economics Regular Training within PHM	Pertamina Hulu Mahakam	2020
<i>Speaker:</i> Field Development Economic Evaluation	Online (organized by SPE Balikpapan Section)	2020
<i>Speaker:</i> A Company Perspective Towards an Attractive Indonesian Oil & Gas Industry	Online (organized by SPE ITB SC)	2020
<i>Judge:</i> Case Study Competition, SPEEDFEST 2020	Online (organized by SPE UPN Veteran Yogyakarta SC)	2020
<i>Speaker:</i> Young Professional Luncheon – My Learning Habits	Online (organized by SPE Balikpapan Section)	2018
<i>Trainer:</i> Oil & Gas Field Development Workshop Regular Training within PHM	Pertamina Hulu Mahakam	2020
<i>Instructor:</i> One-Day Workshop – PHM Day on Field Development	UPN Veteran Yogyakarta	2019
<i>Judge:</i> SMART Competition, IPFEST 2019	Institut Teknologi Bandung	2019



<i>Speaker:</i> Introduction to Petroleum Economic Evaluation	STT Migas Balikpapan	2018
<i>Facilitator:</i> Workshop on Strategies in Dealing with World's Professional Challenges & Opportunities	Institut Teknologi Bandung	2017
<i>Judge:</i> Student Paper Competition, IP Week 2017	Institut Teknologi Bandung	2017
<i>Instructor:</i> One-Day Workshop – TOTAL Day on Field Development	UPN Veteran Yogyakarta	2016
<i>Facilitator:</i> Focus Group Discussion on Career in Oil & Gas during Low Price Environment	Institut Teknologi Bandung	2016
<i>Instructor:</i> Oil & Gas Field Development Workshop for SKK Migas	Balikpapan	2016
<i>Instructor:</i> One-Day Workshop – TOTAL Day on Field Development	Institut Teknologi Bandung	2016
<i>Instructor:</i> Oil & Gas Field Development Workshop as Pre-Event of Joint Convention Balikpapan 2015	Balikpapan & Samarinda	2015
<i>Instructor:</i> One-Day Workshop – TOTAL Day on Field Development	STT Migas Balikpapan	2015

### **Publications (Author & Co-Author)**

#### **Comprehensive Strategies to Maximising Value of Late Life Assets: Lessons Learned from Mahakam Block**

Proceedings of SPE/IATMI Asia Pacific Oil & Gas Conference and Exhibition, SPE-205690-MS, October 2021.

#### **Automation of Well Correlation and Dynamic Synthesis for Efficient Reserves Estimation in Multi-Layered Oil and Gas Field**

Proceedings of SPE/IATMI Asia Pacific Oil & Gas Conference and Exhibition, SPE-205731-MS, October 2021.

#### **Application of Fuzzy Logic for Improvement of Perforation Gain Predictability in Multi-Layered Giant Mature Gas Field**

Proceedings of SPE/IATMI Asia Pacific Oil & Gas Conference and Exhibition, SPE-196455-MS, October 2019.

#### **Continuous Competency Development of Reservoir Engineers to Overcome the Maturity of Mahakam**

Proceedings of IATMI Symposium 2018, IATMI 18-147, October 2018.

#### **Perforation Portfolio Management in Tunu Mature Giant Gas Field by Implementation of Intensive Well Review and Its Application in Production Forecast Improvement and Optimization of Well Intervention Planning**

Proceedings of SPE/IATMI Asia Pacific Oil & Gas Conference and Exhibition, SPE-187023-MS, October 2017.

**Total's Experiences in Tackling Mature Field Challenges in the Mahakam PSC**

Proceedings of AAPG Technical Symposium, "Hidden Potential in Mature Basins: Play Analogs and Best Practices", September 2017.

**Peciko Field Well Intervention Planning Optimization: An Integration of Reservoir Assessment to Field Level**

Proceedings of Indonesian Petroleum Association, 40<sup>th</sup> Annual Convention & Exhibition, IPA16-110-E, May 2016.

**A Novel Tool for Designing Well Placements by Combination of Modified Genetic Algorithm and Artificial Neural Network**

Elsevier, Journal of Petroleum Science and Engineering, Vol. 122, p. 69 – 82, October 2014.

**A New Software Development of Genetic Algorithm Application to Optimize Vertical Well Placements Based on Basic Reservoir Rock Properties Considering Existing Wells, Drainage Radius and Fault Existence for Multi-Layer Reservoirs**

Published by Institut Teknologi Bandung, July 2013.

## ***Biodata Declaration***

I hereby certify that the information given in my Biodata is correct and complete to the best of my knowledge and understand that any misleading statements, failure to disclose information or deliberate omissions will be regarded as grounds for withdrawal of offer or subsequent disciplinary action which may result in dismissal.

**Jakarta, October 2023**

Sincerely,  
Irfan Taufik Rau