



CURRICULUM VITAE

1. Personal

Nama : Giri Nugroho, ST., M.Sc.
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Golongan/Pangkat : III-B / Asisten Ahli
Tempat & Tgl. Lahir : Wonogiri, 29 Oktober 1979
Pekerjaan : Dosen Departemen Teknik Mesin Industri, FV.
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2. Latar Belakang Pendidikan:

1. SMU Negeri I, Surakarta, 1998
2. S1 : Sarjana Teknik, Teknik Mesin, ITS – Surabaya, 1998 -2005.
3. S2 : National Taiwan University of Science and Technology, Taipei, Taiwan, Republic of China, 2010 - 2012.

3. Riwayat Pekerjaan/Jabatan

1. 2006 – sekarang (12 Th) : Dosen Tetap Departemen Teknik Mesin Industri, FV - ITS
2. 2008 – sekarang : Ketua Laboratorium Komputer CAD.
3. 2018 – sekarang : Ketua TUK Menggambar berbantuan CAD- LSP ITS

4. Penghargaan

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5. Pengalaman Kerjasama Dalam Bidang Industri, Energi dan Keprofesian Sebagai Konsultan

1. Modeling Corrosion Pipe Transmision Babat – Gresik with Fluent 6.2., PT PETROKIMIA Gresik (Persero), Surabaya, 2005.
2. Numerical Assesment of Fluid Flow on Boiler HRSG with Fluent 6.2, Fajar Surya Wisesa Project, PT ALSTOM Power ESI Surabaya, 2005.
3. Numerical Assesment of Fluid Flow on Boiler HRSG with Fluent 6.2, Tangguh Project, PT ALSTOM Power ESI Surabaya, 2005.
4. PID and PFD Drawing With CATIA V5R14, PT PERTAMINA Indonesia, Surabaya 2006.
5. Feasibility Study for Coal Power Plant Part 1, PT. Kaltim Daya Mandiri (KDM), Kalimantan timur Indonesia, 2006.
6. Feasibility Study for Coal Power Plant Part 2, PT. Kaltim Daya Mandiri (KDM), Kalimantan timur Indonesia, 2007.
7. Modeling Multiphase oil spill on perak jetty pier, Surabaya, Biro Teknik Mesin, Mechanical Engineering Department, ITS (consultant), 2008.
8. Cfd Simulation on the Optimization blending low and medium rank coal comsption in the low rank coal boiler design. Power plant Unit 8 PLTU Suralaya-PT PLN Litbang, 2013.
9. Cfd Simulation on the Effect of modified diameter of tip burner in the characteristic combustion of natural gas, PT PJB UP Gresik Uit 1 dan 2, 2013.
10. Cfd Simulation on the Optimization Firing nozzle Angle in the low rank coal boiler design. Power plant Unit 8 PLTU Suralaya-PT PLN Litbang, 2013.
11. Kegiatan Konsultasi Computational Fluid Dynamic (CFD) dengan Software Fluent untuk Simulasi Pembakaran CFB PLTU Tarahan), Power plant Unit 3&4 PLTU Tarahan-PT PLN Litbang, 2013.
12. Kegiatan Penyiapan Kader Expert Bidang Mekanika Turbin PT. Pembangkitan Jawa Bali, LPPM- Institute Teknologi Sepuluh Nopember Surabaya (ITS), 2015.
13. Kegiatan Kajian Kelayakan Gasifikasi Boiler Unit 3 dan 4 di PLTU Perak, PT. Indonesia Power Sub Unit PLTU Perak, 2015
14. Redesign Auxiliary Cooling Water Heat Exchanger, PT. PJB Muara Karang, 2015.

15. Reverse Engineering Generator cooler UP Muara Tawar, PT. PJB Muara Tawar, 2015.
16. Reverse Engineering FDF optimasi kebutuhan udara pembakaran, PT. PJB UP Gresik, 2016.
17. Kajian Secondary Flow AH dan Desuperheater menggunakan CFD, PT. PJB UP Gresik, 2016.
18. Kegiatan Konsultasi Computational Fluid Dynamic (CFD) dengan Software Fluent untuk Optimasi CFB PLTU Bolok, PT. PJB Services, Surabaya, 2016.
19. Analisa Engineering pada cooling water CFB PLTU Bolok, PT. PJB Services, Surabaya, 2016.
20. Jasa Konsultasi Computational Fluid Dynamic (CFD) dengan Software Fluent untuk Optimasi pembakaran dan analysis failure di wingwall superheater CFB, PT. PKT Bontang, Kalimantan Timur, 2016.
21. Kajian Peningkatan Efisiensi Boiler PLTU #12, PT. PJB Unit Pembangkitan Gresik, 2016.
22. Pemodelan & Simulasi Computation Fluid Dynamic (CFD) Boiler, PLTU Belitung, PT. PJB Services, Surabaya, 2017.
23. Pemodelan & Simulasi Computation Fluid Dynamic (CFD) Boiler, PLTU Bangka, PT. PJB Services, Surabaya, 2017.
24. Pemodelan & Simulasi Computation Fluid Dynamic CFB Boiler, PLTU Amurang 25 MW Sulawesi Utara, PT. PJB Services, Surabaya, 2017.
25. Pemodelan & Simulasi Computation Fluid Dynamic Stoker Boiler, PLTU Nii Tanasa 10 MW Sulawesi selatan, PT. PJB Services, Surabaya, 2017.
26. Jasa Check Tangensial Boiler A, PT Petrokimia Gresik, 2017.
27. Jasa Pembuatan Geometri Boiler Model Tangensial firing, PLTU Tanjung Awar Awar, Tuban, 2018.
28. Kajian Dual Firing Tiny Burner Boiler, PT. PJB UBJOM Paiton 9, Probolinggo, 2018.
29. Redesign Close Cycle Cooling Water Heat Exchanger Unit #2 PT. Indonesia Power UP Pangkalan Susu, Agustus 2018.
30. Redesign High Pressure Heater #3 PT. Indonesia Power UP Pangkalan Susu, Agustus 2018.
31. Success Story Boiler Combustion Tuning PT. Pembangkitan Jawa Bali, oktober 2018.

32. Feasibility Study Penambahan Intermediate Elemen Primary Air Heater PT. PJB UP Paiton, Oktober 2018.
33. ReDesign Primary and Secondary Air Heater PLTU Amurang, PT PJB UJLJ2, Oktober 2018.
34. Feasibility Study Penambahan Tube pada HRSG UP Gresik PT PJB, Nopember 2018.
35. Kajian Coal Switching PLTU Suralaya, PT. Indonesia Power UP Suralaya 1-7, Januari 2019.
36. Simulasi 3-Dimensi Peta Penyebaran Oil spill, Balikpapan Bay, February 2019.
37. Kajian Boiler CFD unit #1, PT. Indonesia Power UP PLTU Jeranjang, Maret 2019.
38. Kajian Penggantian Runer PLTA Tulungagung, PT. PJB, Mei 2019.
39. Kajian Penggunaan Batubara Kalori Rendah Pada PLTU Tanjung Jati B unit #1-4, PT PLN- Pembangkitan Tanjung Jati B, Juni 2019.
40. Studi Komparasi PLTU kapasitas 2x100 MW di Bintan dengan Boiler tipe CFB dan PC, PT PLN (Persero), Juli 2019.
41. Jasa Asesment Cooling System Unit #1 dan Unit#3, UJP PLTU Jeranjang, PT. Indonesia Power, Agustus 2019
42. Kajian Gas blending Blok A Aceh-Belawan, PT PLN (Persero), September 2019.
43. Kajian Co-Firing Bahan Bakar Batubara dengan Biomass pada PLTU Paiton Unit 1-2, PT. Pembangkitan Jawa Bali (PJB), Oktober 2019.

6. Pengalaman Memberi Training

1. Training Fluent 6.0 Practical Works, PT KAYABA Indonesia 2004.
2. Training Fluent 6.2 For Undergraduate Student (S1) Mechanical Engineering, ITS, Surabaya, 2005.
3. Training Ansys 9.0 For Undergraduate Student (S1) Mechanical Engineering, ITS, Surabaya, 2005.
4. Training Fluent 6.2 For Postgraduate Student (S2) Mechanical Engineering, ITS, Surabaya, 2005.
5. Training Fluent 6.2 For Postgraduate Student (S2) Mechanical Engineering, ITS, Surabaya, 2006.
6. Training Fluent 6.2 Practical Works, PT PETROKIMIA Gresik (Persero), 2006.

7. Training Fluent 6.2 For Postgraduate Student (S2) Mechanical Engineering, ITS, Surabaya, 2007.
8. AutoCAD 2d class of Diploma 1 for PT Nestle Employee, PT.Nestle Gejayan Pasuruan, Indonesia, 2007.
9. Mitsubishi & Training System support PLC Training (participant), PT. Autekindo Sumber Makmur, 2008.
10. Training Fluent 6.2 For Postgraduate Student (S2) Mechanical Engineering, ITS, Surabaya, 2008.
11. Boiler and pressure vessel drawing with AutoCad 2004 2 dimension, PT Puspertino, 2008.
12. Training Fluent Basic Practical Works, PT PLN Litbang (Persero), 2012.
13. Training Fluent Practical Works Advanced-Boiler modeling, PT PLN Litbang (Persero), 2013.
14. Training on Steam System Optimization in Industries (participant), United Nations Industrial Development Organization (UNIDO)- Ministry Of energy and Mineral Resources, 2014.
15. Training on Compressed-Air System Optimization in Industries (participant), United Nations Industrial Development Organization (UNIDO)- Ministry Of Industry, 2014.
16. Capacity Building on the Energy Efficiency Project Financing for Energy Manager in Industries (participant), United Nations Industrial Development Organization (UNIDO)- Ministry Of energy and Mineral Resources, 2014.
17. Pendidikan D1 Otomotif Kerjasama ITS-SULTRA, Pemerintah Provinsi Sulawesi Tenggara, Tahun 2014.
18. Pelatihan Otomotif Electronic Fuel Injection, LPPM- Institute Teknologi Sepuluh Nopember Surabaya (ITS), 2015.
19. Pelatihan Dasar Kontrol Motor Listrik bagi Pelajar SMA/SMK/ sederajat demi terciptanya Kreativitas dan Inovasi di Bidang Sistem Penggerak, LPPM- Institute Teknologi Sepuluh Nopember Surabaya (ITS), 2015.
20. Kegiatan Swakelola Program Cerdas Sultraku Kepada Masyarakat Berprestasi Guru SMK Dalam Pendidikan Profesional Terapan Provinsi Sulawesi Tenggara, LPPM- Institute Teknologi Sepuluh Nopember Surabaya (ITS), 2015.
21. Kegiatan Pembelajaran Computational Fluid Dynamic Tingkat Basic PT. PLN Unit Pendidikan & Pelatihan Palembang, PT PLN Litbang, 2015.

22. Pelatihan CFD & ANSYS Mahasiswa S2-PT. PJB, Mechanical Engineering, ITS, Surabaya, 2017.
23. Pelatihan CFD Boiler unit #1, PT. Indonesia Power UP PLTU Jeranjang, Maret 2019.
24. Pelatihan Computational Fluid Dynamics (CFD) pada Pulverized Coal Boiler Batch 1, Paiton Probolinggo, PT. PJB, Juni 2019.
25. Pelatihan Computational Fluid Dynamics (CFD) pada Pulverized Coal Boiler Batch 2, Lab CAE Teknik Mesin-ITS, PT. PJB, Agustus 2019.
26. Pelatihan Asesor Kompetensi LSP ITS Batch 3, Core hotel Bonet Surabaya-BNSP, September 2019.
27. Pelatihan Cycle tempo dan Ansys Structure, PT. Indonesia Power UP PLTU Jeranjang, September 2019.
28. ReTooling Dosen Vokasi ITS Batch 1, Pneumatics dan Hidraulic : Cylinder Hidraulic, PT Universal Tekno Reksajaya, Nopember 2019.

7 Pengalaman Internasional,

A). Seminar Internasional dengan Mempresentasikan Paper Hasil Penelitian:

1. G Nugroho , MJ Chern. *Immersed Boundary Modeling of Vortex-Induced-Vibration of Structures at Moderate Reynolds Numbers*. Proceedings of 24th Taiwan Society of Naval Architects And Marine Engineers Conference in Taiwan, Taipei, Taiwan, Republic of China., 2012.
2. G Nugroho, A Pradityana, N Husodo, M Mursid, GD Winarto, FT Putrandi, *Mechanism of papaya leaf as organic inhibitor in corrosion process*. AIP Conference Proceedings 1983 (1), 050017
3. A Tarmizi, G Nugroho, A Syaifudi, B Sudarmanta, *Numerical Study Effect of Secondary Air Mass Flow to Characteristics of Circulating Fluidized Bed Boiler*, IPTEK Journal of Proceedings Series, 136-141.
4. RM Wijayanto, B Sudarmanta, A Syaifudin, G Nugroho, *CFD simulation of circulating fluidized bed boiler 30 MW: Effect of primary and secondary air distribution on fluidization behavior*, AIP Conference Proceedings 1983 (1), 020018.

B). Guest Lecture (Dosen Tamu),

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C). Publikasi di Journal International

1. MJ Chern, YH Kuan, G Nugroho, GT Lu, TL Horng , *Direct-forcing immersed boundary modeling of vortex-induced vibration of a circular cylinder*, *Journal of Wind Engineering and Industrial Aerodynamics* 134, 109-121 | vol: | issue : | 2014.
2. MJ Chern, GT Lu, YH Kuan, S Chakraborty, G Nugroho, CB Liao, *Numerial Study of Vortex-Induced Vibration of Circular Cylinder Adjacent to Plane Boundary Using Direct-Forcing Immersed Boundary Method*, *Journal of Mechanics* 34 (2), 177-191 | vol: | issue : | 2018.

8. Pengalaman Seminar Nasional,

Mempresentasikan makalah hasil penelitian pada seminar nasional yang diselenggarakan sebagai berikut,

1. N Ikwan, G Nugroho, WA Widodo , *Simulasi CFD untuk Mengetahui Pengaruh Penambahan Batubara Jenis Medium Rank Coal pada Boiler Jenis Low Rank Coal di Power Plant PLTU Suralaya Unit 8*, 2014.
2. B Sudarmanta, G Nugroho, IN Sutantra, *Simulasi Numerik Proses Pembakaran Pada Prototype Mesin Sinjai Biofuel 650 cc Sistem Injeksi Langsung*, Seminar Nasional Tahunan Teknik Mesin, SNTTM XIII, Kampus UI Depok 2014.
3. DME Soedjono, J Sarsetiyanto, G Nugroho, R Nugrahani, H Mirmanto, *Kaji Eksperimental Cold Box Menggunakan Termoelektrik TEC1-12705*, SENIATI 4 (2), 229-234, 2017

9 Pengalaman Penelitian

1. Djatmiko Ichsani, Prabowo, Wawan Aries W., dan Giri Nugroho. (2006), *Rancang Bangun Pengerig Ikan Metode Hybrida Gabungan Antara Solar Energy Dengan Heat Recovery Dari Kondensor AC.*, *FTI –ITS*, 2006-2007.
2. Tri Yogi Yuwono, Giri Nugroho, dkk., *Penelitian Program Insentif Teknologi Yang Dimanfaatkan Di Industri Tahap 2 tahun 2016 : Pengujian Jarak Tempuh dan Konsumsi Energi Sepeda Motor Listrik GESITS Sesuai Standar Internasional ISO 13064-1*, 2017.

3. Heru Mirmanto, Dedy Zulhidayat Noor dan Giri Nugroho, Upaya Reduksi Corner Stall Pada Aliran Dekat Dinding Melalui Penambahan Turbulent Vortex Generator, *FTI –ITS*, 2017.

Surabaya, Desember 2019

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