



## CURRICULUM VITAE

**Krismadinata, ST., MT., Ph.D.**

**Faculty:** Fakultas Teknik

**Study Programs:** Teknik Elektro Industri

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### Biography

#### Scopus of the Last 5 Years

EXPERIMENTAL INVESTIGATION OF WATER TO AIR HEAT EXCHANGER PERFORMANCE AS PASSIVE COOLING STRATEGY ON VENTILATION SYSTEM IN TROPICAL REGION. EUREKA, Physics and Engineering, Lapisa R., 2023

A Systematic Literature Review of Teaching and Learning on Object-Oriented Programming Course. International Journal of Information and Education Technology, Efan, 2023

Optimized Design of Residential Building Envelope in Tropical Climate Region: Thermal Comfort and Cost Efficiency in an Indonesian Case Study. Journal of Architectural Engineering, Lapisa R., 2022

E-learning Courseware Development for Power Electronics Course. International Journal of Interactive Mobile Technologies, Krismadinata, 2022

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The Interactive Multimedia Learning for Power Electronics Course. International journal of online and biomedical engineering, Krismadinata, 2022

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Solar Energy Utilization Techniques, Policies, Potentials, Progresses, Challenges and Recommendations in ASEAN Countries. Sustainability (Switzerland), Pandey A.K., 2022

DESIGN AND PERFORMANCE OF DUAL AXIS SOLAR TRACKER BASED ON LIGHT SENSORS TO MAXIMIZE THE PHOTOVOLTAIC ENERGY OUTPUT. Journal of Theoretical and Applied Information Technology, Asnil, 2022

Combustion and Emission Characteristics of CNG-Diesel Dual Fuel Engine with Variation of Air Fuel Ratio. Automotive Experiences, Yuvenda D., 2022

Numerical Analysis of the Roof Slope Effect on the Building Thermal Comfort and the Need for Roofing Materials in Tropical Area. International Journal on Advanced Science, Engineering and Information Technology, Lapisa R., 2022

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Characteristics of photovoltaic modules in various configurations for partial shading conditions. Journal of Theoretical and Applied Information Technology, Asnil, 2021

EXPERIMENTAL STUDY OF WINDOW SHADING EFFECT ON BUILDING THERMAL-VISUAL COMFORT IN A TROPICAL REGION. International Journal of GEOMATE, Lapisa R., 2021

Needs assessment vocational education e-learning vocational education. International Journal of Innovation, Creativity and Change, Verawadina U., 2020

Effect of skylight roof ratio on warehouse building energy balance and thermal visual comfort in hot-humid climate area. Asian Journal of Civil Engineering, Lapisa R., 2020

Effect of geometric parameters on the performance of motorcycle catalytic converters. Journal of Physics: Conference Series, Lapisa R., 2020

Human machine interface for step-up DC-DC converter. International Journal of Advanced Trends in Computer Science and Engineering, Krismadinata K., 2020

Preface. Journal of Physics: Conference Series, Rahadian, 2020

Blended learning as instructional model in vocational education: Literature review. Universal Journal of Educational Research, Krismadinata, 2020

A New Syntax of Teaching Factory IR 4.0 Model in Vocational Education. International Journal on Advanced Science, Engineering and Information Technology, Yondri S., 2020

Effect of Collaborative Programming on Students Achievement Learning Object-Oriented Programming Course. International Journal of Information and Education Technology, Krismadinata, 2023

Study on the Addition of A Swirling Vane to Spark Ignition Engines Fueled by Gasoline and Gasoline-Ethanol. Automotive Experiences, Purwanto W., 2023

Photovoltaic Energy Harvesting with Static and Dynamic Solar Modules Employing IoT-Enabled Performance Monitoring. TEM Journal, Krismadinata K., 2023

Exploring the Full Potential of Collaborative Learning and E-Learning Environments in Universities: A Systematic Review. TEM Journal, Wagino W., 2023

Real-Time Monitoring System Using IoT for Photovoltaic Parameters. TEM Journal, Asnil A., 2023

### Web of Science (WoS) of the Last 5 Years

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### Google Scholar of the Last 5 Years

Experimental investigation of water to air heat exchanger performance as passive cooling strategy on ventilation system in tropical region. EUREKA: Physics and Engineering, 32-41, 2023, R Lapisa, A Kurniawan, J Jasman, D Yuvenda, RP Putra, W Waskito, ..., 2023

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COMPARISON OF VARIOUS CONDUCTION MODES FOR THREE-PHASE INVERTER. *Journal of Theoretical and Applied Information Technology* 100 (7), 2022, K KRISMADINATA<sup>12</sup>, I HUSNAINI<sup>12</sup>, A ASNIL<sup>12</sup>, RO REMON LAPISA, 2022

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Monitoring Hasil Pelacakan Cahaya Matahari Sumbu Tunggal. *MSI Transaction on Education* 3 (1), 15-28, 2022, WA Putri, K Krismadinata, 2022

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Rancang Bangun Sistem Keamanan Pintu Gudang Menggunakan RFID Berbasis IoT. *MSI Transaction on Education* 3 (4), 175-186, 2022, KD Zulfian, K Krismadinata, 2022

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Nagari Mandiri Energi dengan Pembangkit Listrik Tenaga Mikro Hidro. *Suluah Bendang: Jurnal Ilmiah Pengabdian Kepada Masyarakat* 22 (3), 658-671, 2022, K Krismadinata, A Asnil, I Husnaini, T Andayono, M Yandra, R Lapisa, 2022

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Combustion and Emission Characteristics of CNG-Diesel Dual Fuel Engine with Variation of Air Fuel Ratio. *Automotive Experiences* 5 (3), 507-527, 2022, D Yuvenda, B Sudarmanta, J Jamaludin, O Muraza, RP Putra, R Lapisa, ..., 2022

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An overview of the teaching and learning process basic programming in algorithm and programming courses. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)* 12 (2) ..., 2021, W Susanti, 2021

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Design and Manufacture of Wireless Monitoring system of Photovoltaic Generation Employing Raspberry PI 3. *ELKHA* 13 (1), 19-24, 2021, K Krismadinata, P Kusuma, Y Yahfizham, 2021

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- Modelling demand response to alleviate congestion in active power market. *Int J* 10 (2), 2021, E Astrid, CD Krismadinata, DTP Yanto, 2021
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- Developing blended learning model in vocational education based on 21st century integrated learning and industrial revolution 4.0. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)* 12 (8) ..., 2021, N Jalinus, 2021
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- Pengembangan Training Kit kendali elektronik pada mata pelajaran mengoperasikan sistem kendali elektronik. *Jurnal Pendidikan Teknologi dan Kejuruan* 18 (1), 89-98, 2021, K Krismadinata, A Anwar, J Akbar, 2021
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- Introduction to questionnaire data patterns using Perceptron Algorithm for lecturer improvement and development in higher education. *INVOTEK: Jurnal Inovasi Vokasional dan Teknologi* 21 (1), 1-10, 2021, I Irwan, RR Putra, K Krismadinata, N Jalinus, 2021
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- Increasing Critical Thinking Through the Blended Socratic Method of Teaching Model. *JPI (Jurnal Pendidikan Indonesia)* 10 (2), 297-305, 2021, K Krismadinata, N Jlinus, AL Lubis, D Ramadhani, 2021
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- Data Acquisition of PV Mini-Grid Voltage and Current using Arduino and PLX-DAQ. *MOTIVECTION: Journal of Mechanical, Electrical and Industrial Engineering* 3Â ..., 2021, A Murfianah, K Krismadinata, Y Elviralita, 2021
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- Online Learning Innovation in the Era and Post Covid-19 Pandemic. *Advances in Social Science, Education and Humanities Research* 4, 5, 2021, W Susanti, J Krismadinata, RY Rangga, TN Yandri, 2021
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- Pengembangan Konverter CUK untuk Praktikum Elektronika Daya. *MSI Transaction on Education* 2 (4), 169-182, 2021, K Krismadinata, J Akbar, 2021
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- Efektifitas Pengembangan Model Diva Learning Manajemen System Pada Matakuliah Algoritma Dan Pemrograman. *Jurnal Pendidikan Teknologi Kejuruan* 3 (2), 104-108, 2020, LS Muchlis, K Rukun, K Krismadinata, 2020
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- Effect of skylight–roof ratio on warehouse building energy balance and thermal–visual comfort in hot-humid climate area. *Asian Journal of Civil Engineering* 21, 915-923, 2020, R Lapisa, A Karudin, M Martias, K Krismadinata, A Ambiyar, Z Romani, ..., 2020
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- Utilization of Information System Dashboard of Internal Quality Guarantee at STT-Ibnu Sina Batam. *Solid State Technology* 63 (3), 946-956, 2020, M Ropianto, K Rukun, B Krismadinata, Y Durachman, 2020
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PENGUKURAN TINGKAT KEBERGUNAAN SISTEM INFORMASI ANALISIS JABATAN DAN BEBAN KERJA MENGGUNAKAN TECHNOLOGY ACCEPTANCE MODEL. SISTEMASI 9 (3), 409-418, 2020, K Krismadinata, WJ Sari, G Ganefri, U Verawardina, 2020

Wireless Monitoring System For Photovoltaic Generation With Graphical User Interface. International Journal of Scientific & Technology Research 9 (08), 528-533, 2020, A Asnil, K Krismadinata, I Husnaini, F Gunawan, 2020

Blended learning as instructional model in vocational education: literature review. Universal Journal of Educational Research 8 (11B), 5801-5815, 2020, UV Krismadinata, N Jalinus, F Rizal, PS Sukardi, D Ramadhani, AL Lubis, ..., 2020

Aplikasi IoT untuk kendali beban listrik. JTEIN: Jurnal Teknik Elektro Indonesia 1 (2), 207-211, 2020, A Asnil, K Krismadinata, F Eliza, I Husnaini, R Maulana, 2020

Perencanaan Enterprise Architecture Pelayanan Informasi Meteorologi Klimatologi dan Geofisika. JSINBIS (Jurnal Sistem Informasi Bisnis) 10 (2), 145-154, 2020, K Krismadinata, M Minangsih, Y Yahfizham, U Verawardina, 2020

Buku model flipped blended learning. Penerbit CV. Sarnu Untung, 2020, N Jalinus, U Verawardina, PD Krismadinata, 2020

Kendali Kecepatan Motor DC Dengan Kontroller PID dan Antarmuka Visual Basic. JTEV (Jurnal Teknik Elektro dan Vokasional) 6 (1), 328-339, 2020, R Muhardian, K Krismadinata, 2020

Rancang Bangun Inverter Satu Fasa Dengan Dengan Modulasi Lebar Pulsa PWM Menggunakan Antarmuka Komputer. Jtev (Jurnal Teknik Elektro Dan Vokasional) 6 (1), 340-351, 2020, D Nugraha, K Krismadinata, 2020

Design of Boost Converter Integrated with Graphical User Interface. MOTIVECTION: Journal of Mechanical, Electrical and Industrial Engineering 2 ... , 2020, S Badri, K Krismadinata, 2020

Rancang Bangun AC to AC Converter Tiga Fasa dengan Visual Basic. JTEV (Jurnal Teknik Elektro dan Vokasional) 6 (2), 152-167, 2020, SL Luthfiani, K Krismadinata, 2020

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Human machine interface for step-up DC-DC converter. International Journal of Advanced Trends in Computer Science and Engineering ... , 2020, K Krismadinata, S Badri, R Maulana, A Asnil, I Husnaini, 2020

A New Syntax of Teaching Factory IR 4.0 Model in Vocational Education. International Journal on Advanced Science, Engineering and Information ... , 2020, S Yondri, Ganefri, Krismadinata, N Jalinus, Sukardi, 2020

### Research of the Last 5 Years

Integrated Solar Thermal-induced Ventilation With Thermoelectric Generator Untuk Efisiensi Energi Dan Kenyamanan Bangunan. Pd-penelitian Dasar, Leader: Remon Lapisa, Implementation Year: 2022

Rancang Bangun Training Kits Dc-dc Converter Sebagai Media Pratikum Elektronika Daya Dengan Graphical User Interface. Pt-penelitian Terapan, Leader: Krismadinata, Implementation Year: 2022

Pemodelan Dan Karakterisasi Electronic Load Controller Generator Induksi Untuk Pembangkit Listrik Tenaga Piko Hidro. Penelitian Kerjasama Perguruan Tinggi Luar Negeri, Leader: Krismadinata, Implementation Year: 2022

Alternatif Peningkatan Produksi Energi Listrik Pada Pembangkit Listrik Tenaga Surya Menggunakan Konsep Pelacak Posisi Matahari. Pd-penelitian Dasar, Leader: Asnil, Implementation Year: 2022

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Alternatif Peningkatan Produksi Energi Listrik Pada Pembangkit Listrik Tenaga Surya Menggunakan Konsep Pelacak Posisi Matahari. Pdpt-penelitian Dasar, Leader: Asnil, Implementation Year: 2021

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Pemodelan Dan Karakterisasi Electronic Load Controller Generator Induksi Untuk Pembangkit Listrik Tenaga Piko Hidro. Pdpt-penelitian Kerjasama Perguruan Tinggi Luar Negeri Dasar, Leader: Krismadinata, Implementation Year: 2021

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Integrated Solar Thermal-induced Ventilation With Thermoelectric Generator Untuk Efisiensi Energi Dan Kenyamanan Bangunan. Pdpt-penelitian Dasar, Leader: Remon Lapisa, Implementation Year: 2021

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Rancang Bangun Training Kits Dc-dc Converter Sebagai Media Pratikum Elektronika Daya Dengan Graphical User Interface. Ptpt-penelitian Terapan, Leader: Krismadinata, Implementation Year: 2021

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Manajemen Energi Bangunan Berbasis Internet Of Thing. Penelitian Dasar, Leader: Krismadinata, Implementation Year: 2020

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Aplikasi Integrasi Pembangkit Listrik Tenaga Surya Dengan Pemanas Surya Untuk Rumah Hemat Energi. Penelitian Terapan Unggulan Perguruan Tinggi, Leader: Krismadinata, Implementation Year: 2020

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Rancang Bangun Smart Halte Hemat Energi Dengan Integrasi Pembangkit Listrik Tenaga Surya Dan Termoelektrik. Penelitian Pengembangan, Leader: Krismadinata, Implementation Year: 2020

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Rancang Bangun Penyearah Terkendali Tiga Fasa Untuk Simulator Pembangkit Listrik Tenaga Surya (plts). Penelitian Dasar, Leader: Asnil, Implementation Year: 2020

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### **Community Service of the Last 5 Years**

Pengembangan Pusat Produksi Peralatan Praktikum Teknologi Kejuruan. Program Pengembangan Usaha Produk Intelektual Kampus (ppupik), Leader: Krismadinata, Implementation Year: 2022

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Rancang Bangun Pembangkit Listrik Tenaga Piko Hidro Sebagai Sumber Energi Berkelanjutan Ramah Lingkungan Bagi Masyarakat Ngalau Baribuik Batu Gadang Padang. Program Pengembangan Nagari Binaan (ppnb), Leader: Remon Lapisa, Implementation Year: 2022

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Pengembangan Pusat Produksi Peralatan Praktikum Teknologi Kejuruan. Program Pengembangan Usaha Produk Intelektual Kampus (ppupik), Leader: Krismadinata, Implementation Year: 2021

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Peningkatan Kompetensi Bidang Internet Of Thing (iot) Melalui Workshop Perancangan Dan Aplikasi Iot Berbasis Arduino Di Smk N 1 Sutera Kabupaten Pesisir Selatan. Program Kemitraan Masyarakat (pkm), Leader: Asnil, Implementation Year: 2020

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### **IPR's of the Last 5 Years**

Data Logger Karakteristik Panel Surya. Inventor: Asnil, Krismadinata, Irma Husnaini, Dhalmiga Pratama, Bagus Suryanto, Publication Date: 2021-07-01

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BOOST CONVERTER. Inventor: Asnil, Krismadinata, Irma Husnaini, Junaidi Akbar, Publication Date: 2022-05-15

Sistem Pelacak Posisi Matahari Menggunakan Sumbu Ganda. Inventor: Asnil, Krismadinata, Irma Husnaini, Dhalmiga Pratama, Bagus Suryanto, Publication Date: 2021-07-01

BUCK CONVERTER. Inventor: Asnil, Krismadinata, Irma Husnaini, Junaidi Akbar, Publication Date: 2022-05-15

Aplikasi Pengendali PI dan PID Pada Kendali Kecepatan Motor DC Shunt. Inventor: Irma Husnaini, ST., MT; Krismadinata, ST., MT., Ph.D; Asnil, S.Pd., M.Eng, Publication Date: 2020-11-18

Alat Uji Karakteristik Panel Surya. Inventor: Asnil, Krismadinata, Irma Husnaini, Publication Date: 2020-11-02

### Book of the Last 5 Years

Panduan praktikum elektronika daya dengan pendekatan saintifik. ISBN: 9786236766705, Publisher: CV. Samu Untung, Year: 2022

Pemrograman visual. ISBN: 9786233721752, Publisher: Rajawali Pers, Year: 2021