

Laurensius Rivian Pratama

One of the designers of all time...

+62-878-7953-5285 - rivianp@gmail.com - <https://itsrivian.space>

EDUCATION

INSTITUT TEKNOLOGI BANDUNG

Faculty of Art and Design, Industrial Design Major

Bandung, West Java

2018-2022

- **GPA:** 3.66 / 4.0 (Cum Laude)
- **Relevant Coursework:** User-Centered Design, Design Anthropology, Interaction & Service Design, Product Semantics, Design Ergonomics, Design & Human Factor

WORK & LEADERSHIP EXPERIENCE

LAUREN'S CRIB

Founder

Bekasi, West Java

Feb 2025 - Present

LAUREN'S CRIB is my experimental research initiative where I explore AI and materiality through a human phenomenological lens. I'm chasing questions about empathy and new-materialism, how we assign value to immaterial things, and what that means as novel materials and AI become part of everyday life.

- Essair (<https://essair.site>) – Built an AI writing companion that helps people think and reflect through deliberately flawed, neurotic personas that challenge their reasoning. Think of it as Socrates as a character.ai persona, but for reviewing documents.
- Noisotron (<https://noisotron.vercel.app>) – Built an audio visualizer featuring a simulated live-chat overlay driven by pregenerated LLM commentary that reacts dynamically to real-time acoustic changes, presented in 97kobolab, experimental builder space in Jakarta.
- Lauren Project (<https://lauren-project.vercel.app>) – Built an empathetic AI tool designed to serve as a relationship advisor, trained on the most intimate layer of personal data available: private chat messages exchanged with loved ones

WASTE4CHANGE ENGINEERING & TECHNOLOGY

Lead Product Development - Full-time

Bekasi, West Java

Nov 2023 - July 2025

Waste4Change is an Indonesian circular-economy company that provides end-to-end responsible waste management services and designs material recovery facilities and custom waste-processing systems.

- Led product development in the pre-incubation stage of Waste4Change's Engineering & Technology division, researching on-site bottlenecks and redesigning components and layouts of the ASANO waste-processing machine and internal MRF line to improve throughput, ergonomics, and reliability.
- Guided business decisions during the division's pre-incubation stage and led a team of 6 interns across both business-as-usual operations and research and development workstreams.
- Co-developed a sales proposal pipeline for B2B & B2G that combined bespoke AI tools and an internal information system to generate faster client proposals.
- Co-developed technical communication assets such as website pages, product catalogue, and operator manuals, restructuring engineering information so clients and field operators can quickly understand machine capabilities, installation, and daily workflows.
- Coordinated TKDN (local content) documentation with various stakeholders for several products for the Ministry of Industry, gathering supplier data and compiling the submission, which was accepted without major revision.
- Created BABBLIN, an experimental AI playful waste-sorting bin interface that uses character-like visuals to nudge people to put waste in the correct bin, from concept and visual system to pilot deployment inside the company.

Apple Developer Academy

Junior Developer (Apple Platform) - Internship

South Tangerang, Banten

Mar 2023 - Dec 2023

Asia's first-ever initiative to empower Indonesia's economy by creating world class developers for the world's most innovative and vibrant app ecosystem by Apple Inc.

- Alica – Co-developed an iPad AAC app for non-speaking communicators, localized PECS-style cards for Indonesia, and produced the app's promotional video trailer.
- Haunted Forest: Hunter & Brewers – Sound designer for a 2-player macOS co-op survival game; created and edited music, ambience, and sound effects in GarageBand.
- NostroVision – Solo-led concept, design and development of a HealthKit-based walking app that predicts “longevity chance” to gamify daily step goals.
- Dimas – Co-developed an MRT station iPad wayfinding app that guides passengers to the optimal exit gate.
- LiftDrive – Co-developed an iOS gym-coach app delivering beginner workout plans, exercise demos and form tips to reduce gym anxiety.

- Invents – Co-developed a social feedback app enabling anonymous questions, journaling of advice, and a curated feed from trusted contacts.

PT. TRUSUR UNGGUL TEKNUSA

Bandung, West Java

Product Designer - Contract

Jul 2022 - Sept 2022

PT. Trusur Unggul Teknusa is an environmental technology company that focuses on instrumentation ecosystem and monitoring ecosystem to support various business sustainability.

- Co-designed TRUSUR ACTIS air quality monitoring system device to ensure effectiveness of its user operability, with high usability and high portability, using modular compact design.

MAGGNUS - Paguyuban Pegiat Maggot Nusantara

Bandung, West Java

UI/UX Designer - Volunteer

Feb 2022 - Mar 2022

Paguyuban Pegiat Maggot Nusantara is a nonprofit organization that focuses on the tackling of food waste issues by utilizing black soldier fly maggots to compost food waste, while MAGGNUS is an online learning platform that educates people on how to compost food waste using black soldier fly maggots.

- Designed the user interface and user experience of the MAGGNUS website in a mobile-first manner, applied best practices in web usability and web responsiveness.
- Created wireframe and user flows with already defined user persona and information architecture, tested different layouts and interactions.
- Worked with a team of fine art majors responsible for creating high quality artworks and visual assets, delivered the final prototype to the front-end & back-end engineer team while ensuring that all design elements were implemented in a pixel-perfect manner in the final product.

MASPION ELECTRONICS

Sidoarjo, East Java

Product Designer - Internship

May 2021 - Aug 2021

Designed mass-manufacturable new Electric Wall Fan product nicknamed 'PW18-C'.

- Performed reverse-engineering; validating structural robustness using finite-element method of existing Maspion's Electric Wall Fan product.
- Developed new product brand identity for long-time usage.
- Utilized injection molding method with ISO-SNI standard while maintaining ease of assembly; optimized cost & material efficiency using shape optimization by static stress analysis; managed to utilize existing internal electronics component & assembly line.
- Implemented human-centered design principles while developing a new control system for Electric Wall Fan product with manual control function.
- Managed to ensure 3D modeling workflow interchangeability between Fusion 360 and company-standard Unigraphics NX 4.0.
- Created the final product showcase with video rendering in a week.

ITB Institute for Research and Community Services

Selayar Islands, South Sulawesi

Researcher - Assistant

Feb 2021 - Dec 2021

Employed to assist the utilization of backshore beach PP-plastic waste into modular-buoy usage for local seaweed farming in the Selayar Islands project using open hardware plastic recycling machines.

- Designed buoy design alternatives with singular mold which simultaneously acted as male and female parts.
- Performed structural buckling analysis using FEM with hydrostatic pressure load on 3D CAD buoy design to maximize waterproofing performance.
- Conducted rapid prototyping using FDM printer; simulates real world usage by submerging the prototype in home-usage bath water container to ensure sealing performance.

INDDDES ITB

Bandung, West Java

Website Development - Project Manager

Jul 2020 - Feb 2021

Managed and assisted the team regarding survey research, content, UI/UX, front-end and back-end for Industrial Design Student Society (Himpunan Mahasiswa Desain Produk) Website.

- Defined website's tech-stack; utilize Gatsby.js, Netlify, and GitLab as its JAMstack framework
- Wrote first half of its JS code with Gridsome before migrating to Gatsby.js.
- Validated feasibility of Figma prototype without compromising aesthetic & usability, cost, performance, and user experience.
- Reviewed the final website with its JS/HTML & CSS source code; usability testing across various devices & screen size while ensuring its design responsiveness.

AKSANTARA ITB

Aerodynamics and Mechanical Designer - Volunteer

Bandung, West Java

Mar 2020 - Dec 2021

Aksantara is a UAV research and development unit from Institut Teknologi Bandung that focuses on developing innovative unmanned aerial vehicles. Our team participates in national and international competitions, and also publishes papers on UAV technology.

- Co-authored paper which was published in IEEE under ICARES 2021 conferences with title "Biplane Wing Gap Influence Study of UAV with Wing-shaped Fuselage using Computational Fluid Dynamics".
- Designed and developed the mechanical & airframe of the small cargo UAV prototype 'FEAD' to revolutionize instant package delivery in remote areas with the Technology Development Airframe department.
- Performed computational fluid dynamics study of FEAD to analyze flight performance & wing distance influence; ensuring best configuration of it's biplane wing, airfoil-like payload design usage.

FLYGENE SYSTEM

Personal Project

Bekasi, Jawa Barat

Oct 2014 - Nov 2015

- At 13, I reverse-engineered my mom's Windows-based sales insurance quotation (SQS) software, ported the app to Android, and sold it on the Play Store, mostly just by self-taught and reading documentation.
- Google revoked my developer account after repeated warnings for violating the insurance company's developer terms (I wasn't familiar with the legal stuff yet).

COMMUNITY EXPERIENCE

GANESHA IOTECH

Competition and Incubation Division - Project Manager

Bandung, Jawa Barat

Aug 2020 - Feb 2021

An IoT-based event in ITB that aims to provide education and implement innovative solutions to create impactful change.

- Managed the team who creates and designs the concept of first national scale IoT-based Competition and Incubation events in ITB which consist of 140+ participants from various top-level universities in the global pandemic era.

KALIOPE ITB

Documentation Division - Project Manager

Bandung, Jawa Barat

Jan 2019 - May 2019

Kaliope ITB was the final exhibition of TPB FSRD 2018, consisting of students' final projects and assignments.

- Led the whole documentation team for trailer productions, internal documentary video, pre-event & event documentations, and after-movie.
- Managed to attract more than 2000 visitors to the exhibition in May 2019.

HONORS & AWARDS

2024 Swift Student Challenge

Mar 2024

Apple

Selected as a 2024 Swift Student Challenge winner for *MyopiaSim*, an interactive Swift playground that simulates what the world looks like at different levels of myopia. Designed a visual-novel experience to help children understand nearsightedness and encourage better eye-care habits through playful storytelling and gamified choices.

3rd Winner in Airframe Technology Development with Atyasa Bramantya Team

Nov 2020

Kontes Robot Terbang Indonesia 2020

Pusat Prestasi Nasional, Kementerian Pendidikan dan Kebudayaan Republik Indonesia

Conducted aerodynamic analysis; designed airframe structure; examined user experience; drafted laser cut layout template as main prototyping method.

PUBLICATIONS

Diqnada, D., Dyatmika, W. W., Fahimna, B., **Pratama, L. R.**, & Amalia, E. (2021). Biplane Wing Gap Influence Study of UAV with Wing-shaped Fuselage using Computational Fluid Dynamics. 2021 IEEE International Conference on Aerospace Electronics and Remote Sensing Technology (ICARES). <https://doi.org/10.1109/icares53960.2021.9665203>

Rivian Pratama, L. (2022). THE DEVELOPMENT OF SINGLE-USE PLASTIC BAG FASTENING DEVICE UTILIZING PLASTIC CUP WASTE (CASE STUDY: THE PROBLEM OF CABLE TIES USAGE AS PLASTIC BAG FASTENER AND PLASTIC CUP WASTE). ITB Digital Library. <https://digilib.itb.ac.id/gdl/view/65696>

SKILLS, ACTIVITIES & INTERESTS

Languages: Native in Indonesian; Professional working proficiency in English

Skills: Adobe Creative Suite, Figma, Fusion 360, SolidWorks, ANSYS, Cinema 4D, Octane Render, Keyshot, Unreal Engine, React.js, Swift, C++ (Arduino), HTML/CSS, Visual Basic, 3D Printing (FDM), Garageband

Interests: 3D Modeling & Rendering, UI/UX, IoT, Arduino, AI/ML, Web Development, Videography, Photography, Motion Graphics, Aerodynamics, Material Sustainability, CMF (Color, Material, Finish), Sound Design