



Data Centric Artificial Intelligent and e-Business System (DaCAIBS) Research Group



About Data Centric Artificial Intelligent and e-Business System (DaCAIBS)



Establish in 2018 as Data Engineering and Process Optimization (Depro)



This research group focuses on the processing and visualization of big data based on integrated artificial intelligence in the business environment as a tool in decision support systems.



E-business applications: e-health system, e-recruitment system, mitigation-early warning-emergency system, marketplace, e-government supported system with geospatial processing

Team Member

Arna Fariza (Leader)
Dian Septiani Santoso
Fitrah Maharani Humaira
Fitri Setyorini
Hero Yudo Martono
Rengga Asmara
Wiratmoko Yuwono
Yanuar Risah Prayogi
Yuliana Setiowati





Visi

- Menjadi riset grup yang unggul dalam membangun sistem e-business yang cerdas.

Misi



Membangun sistem e-business yang dapat dijual secara umum dengan memanfaatkan teknologi terkini.



Menerapkan teknik kecerdasan buatan pada analisis big data untuk menghasilkan keputusan yang lebih akurat.

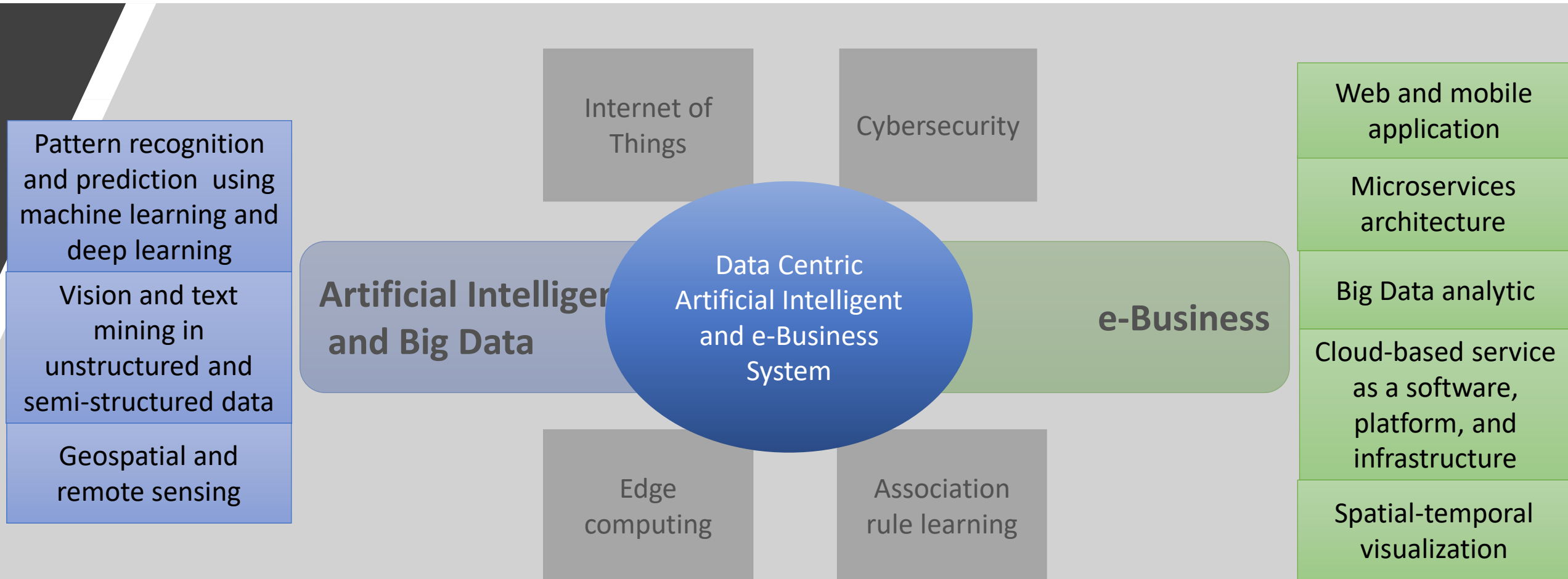


Mengintegrasikan data-centric AI dengan sistem e-business yang menghasilkan aplikasi yang bernilai tinggi.



Pemrosesan informasi geospasial dan inderaja

Research Area



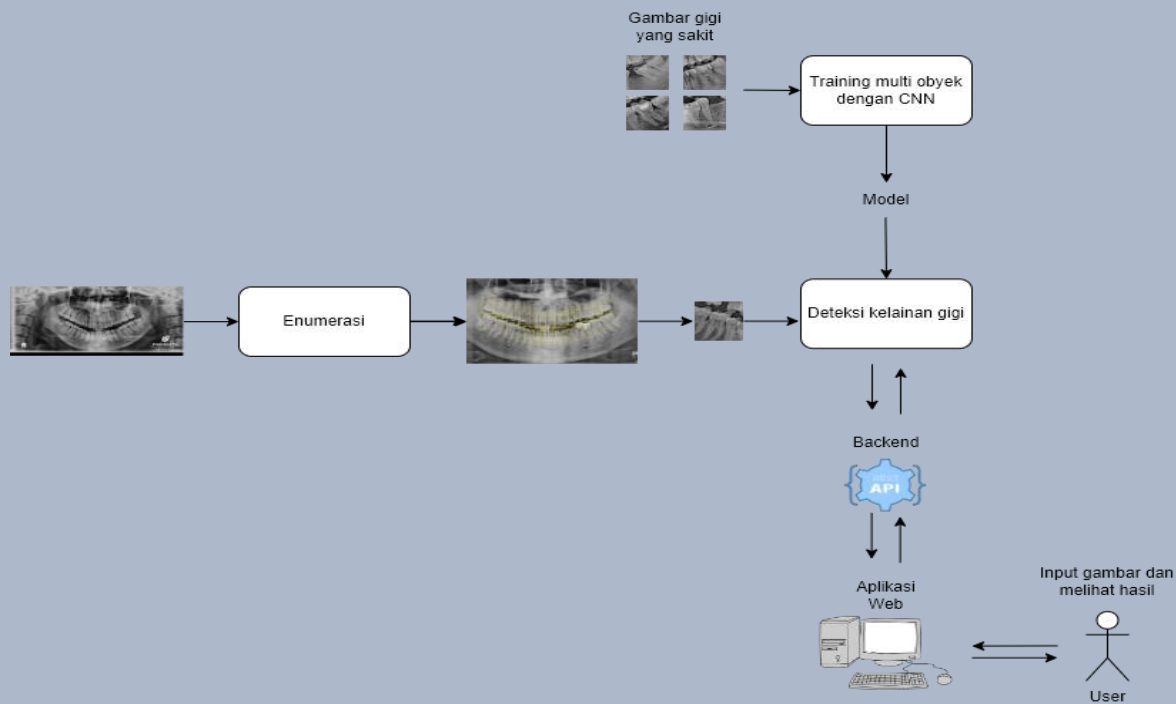


Road Map

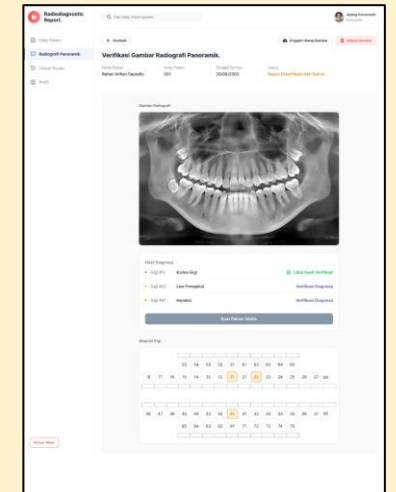
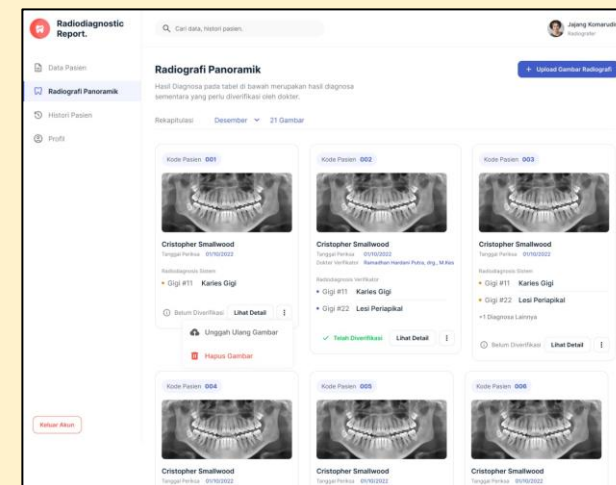
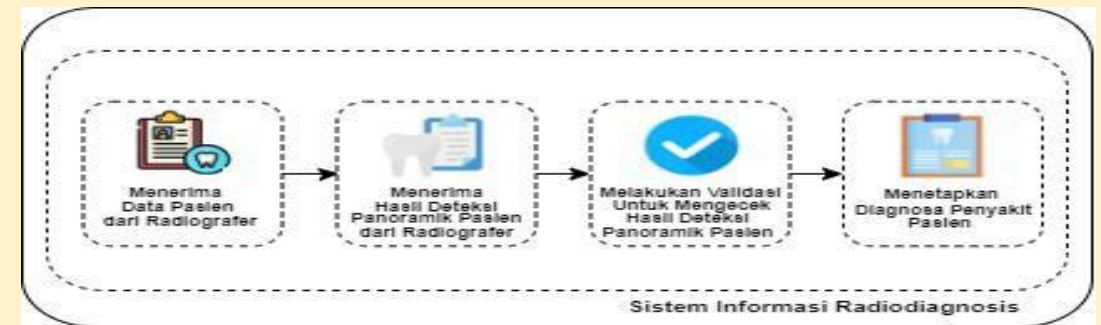
	2022	2023	2024	2025	2026	2027
Product	Software as a service (SaaS): Radiodiagnostic Report system, Tele rehabilitation system, smart aquaculture system, The Monggo Pakar Application etc		Platform as a Service (PaaS): Integration Data-Centric AI and e-Business system		Infrastructure as a Service (IaaS): microservice system, continuing improvement	
Technology	Web and mobile platform, cloud-based system		Data warehouse, big data analytic		Server, Cluster Server, Network, Cyber-security	
Research and Development	Machine learning and deep learning as a decision support system		Integration with IOT and edge computing		Smart system for data warehouse and big data	

Ongoing Research - PENS-UA Radiodiagnostic Report

Dental and Supporting Tissue Anomalies Recognition

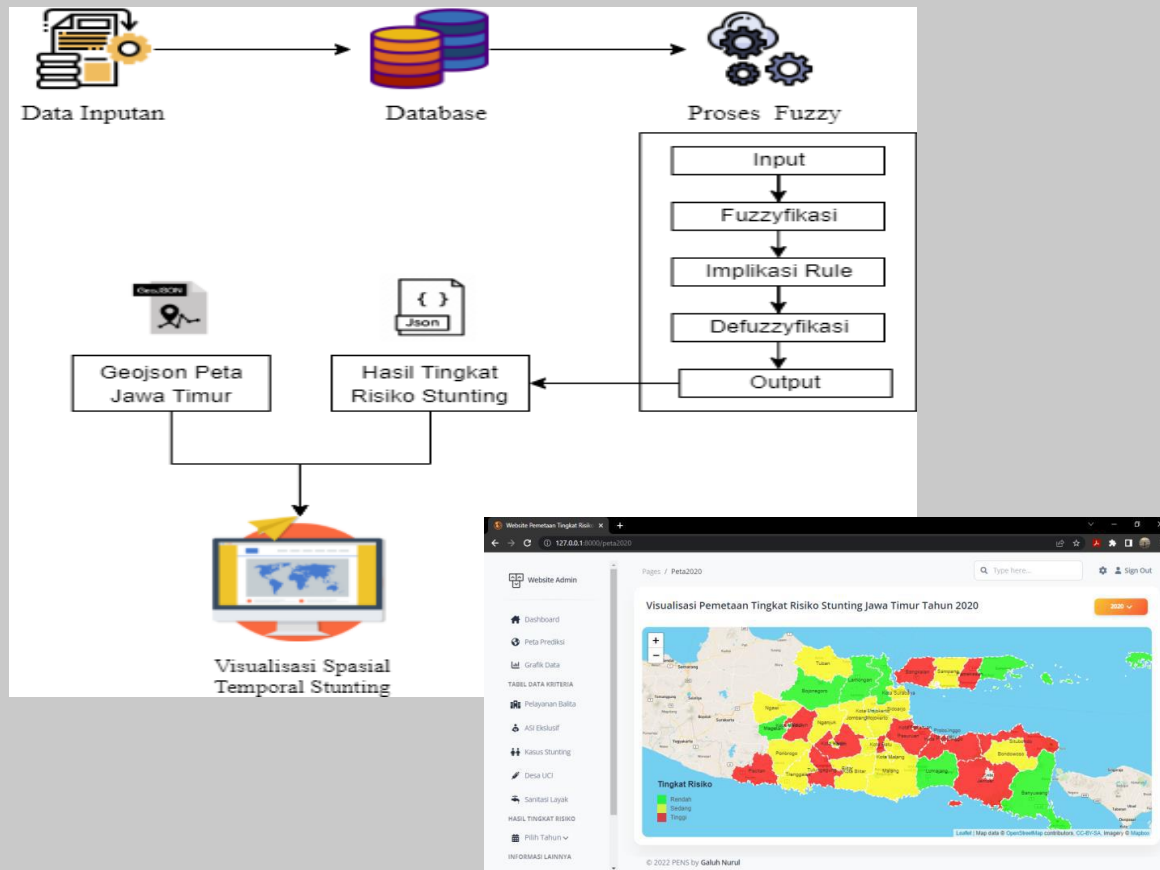


Radiodiagnosis information system

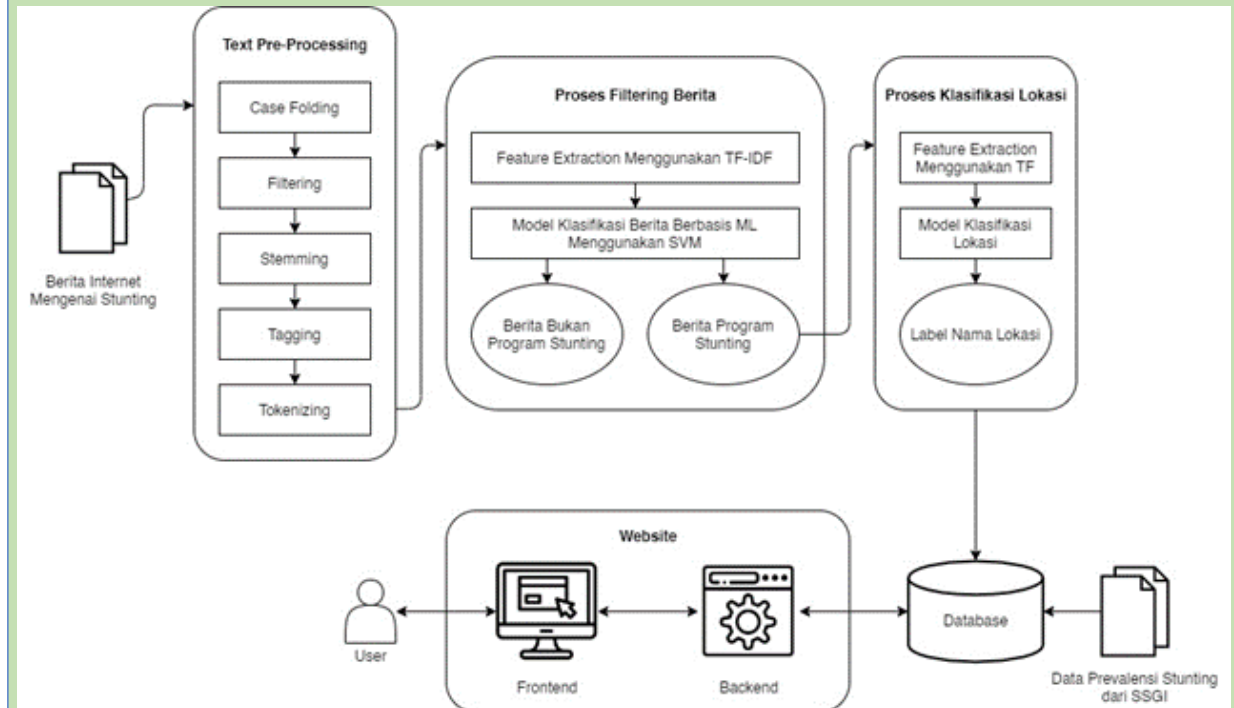


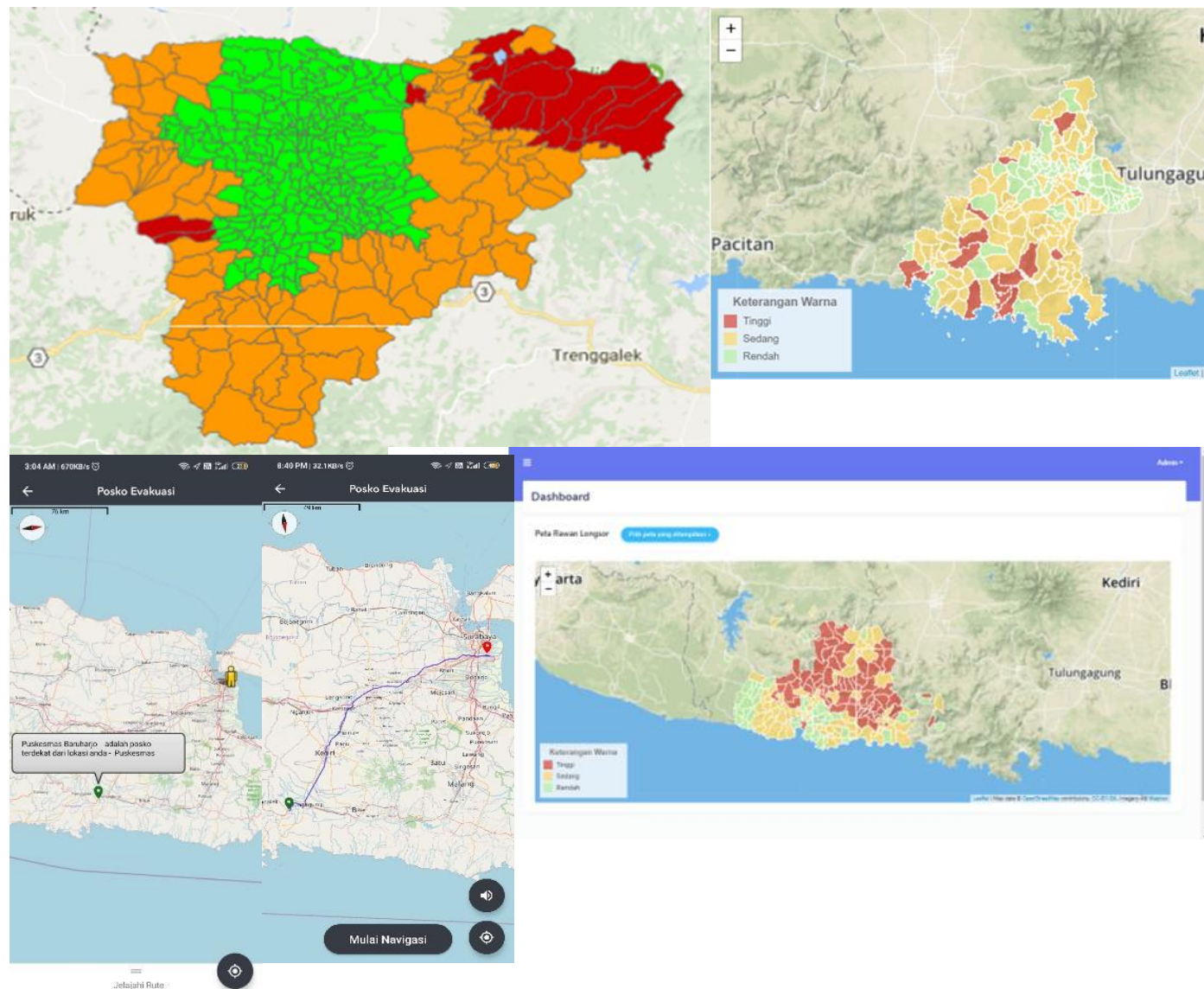
Ongoing Research – Stunting Visualization and Information System

Spatial Temporal Visualization of Stunting Risk Levels



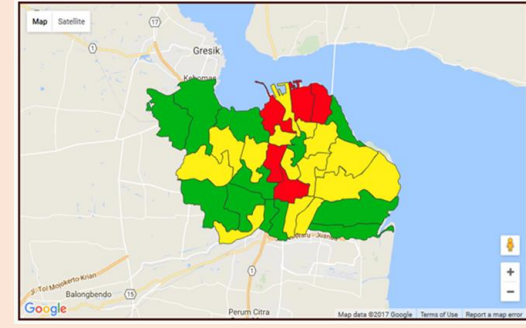
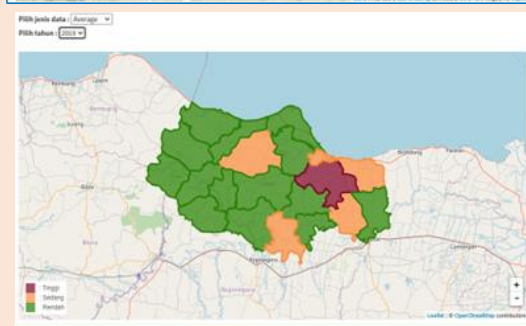
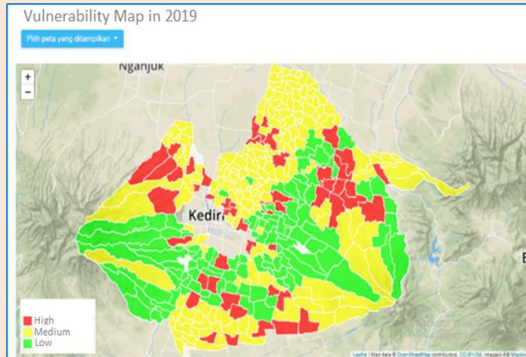
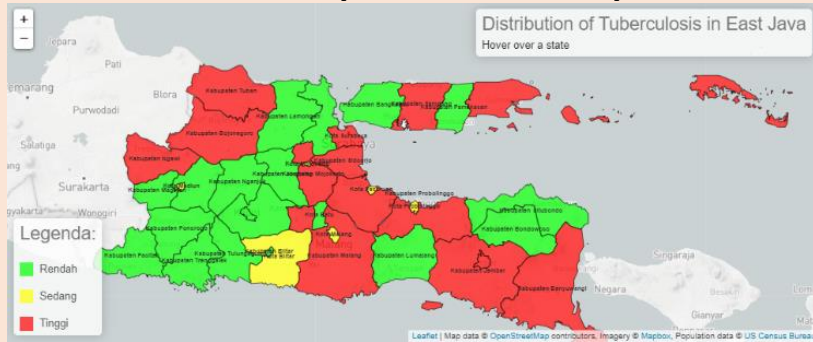
Visualization of The Stunting Program from Internet Media News Using Text Classification



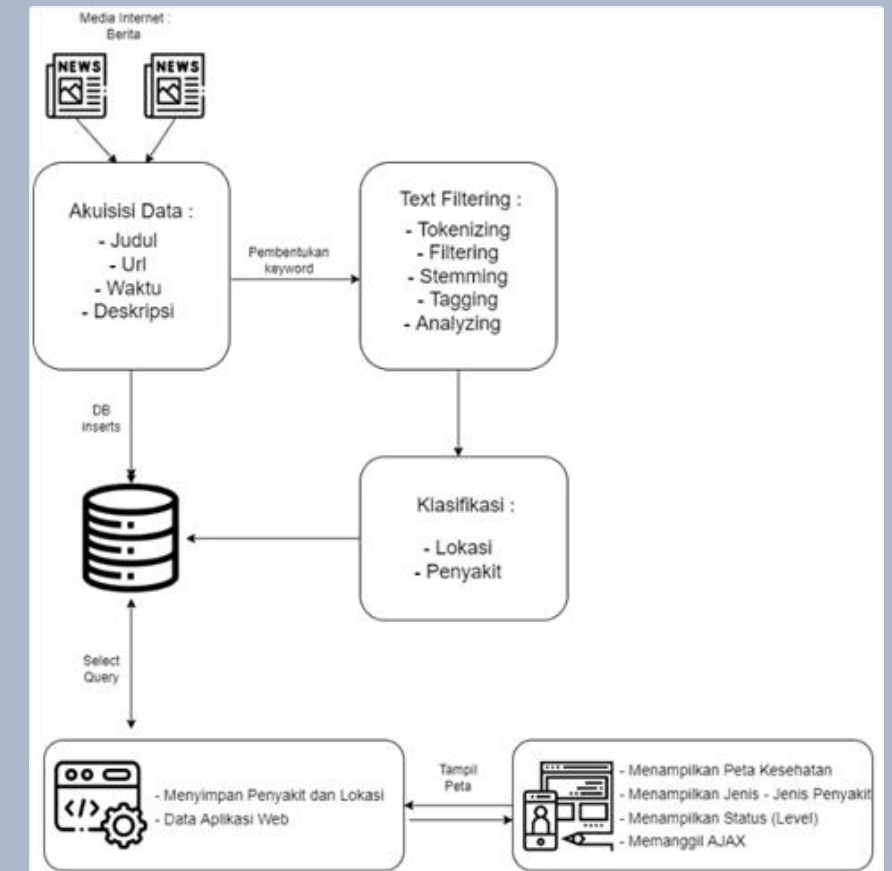


Ongoing Research - Visualization of Endemic Diseases

Spatial-Temporal Visualization

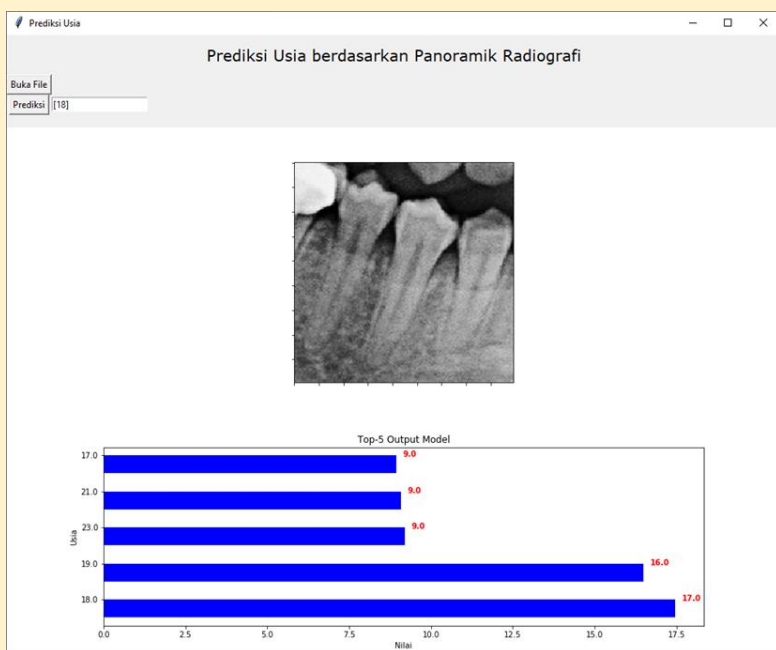


Monitoring Infection Diseases in East Java With Internet Media Classification And Visualization

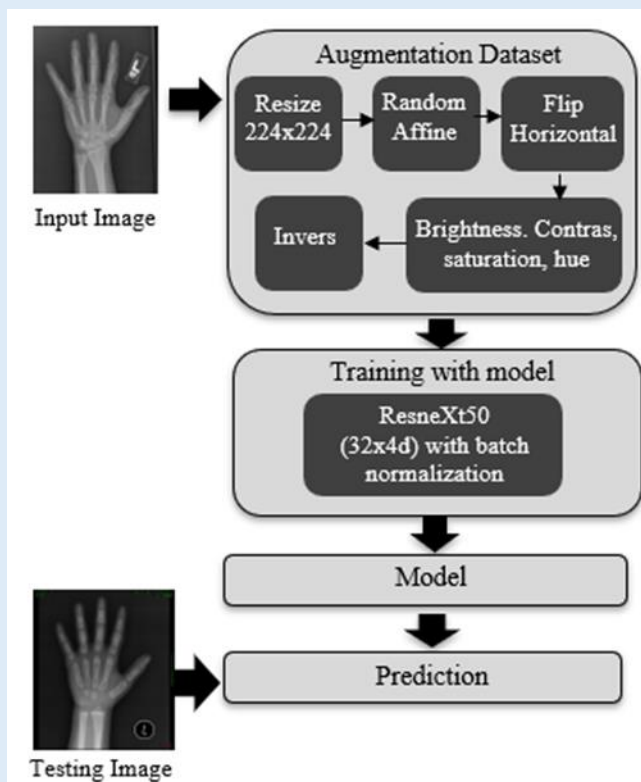


Ongoing Research – Human Identification System

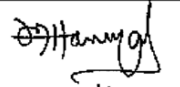
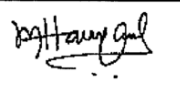
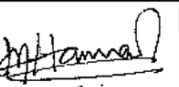
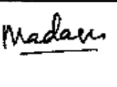
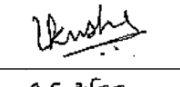
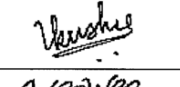
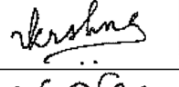
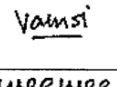
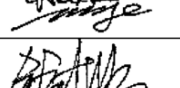
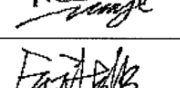
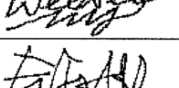
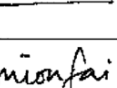
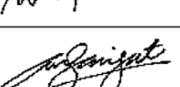
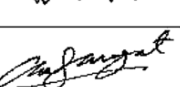
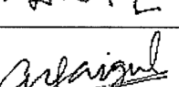
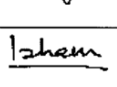
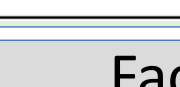
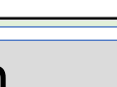
Dental age estimation



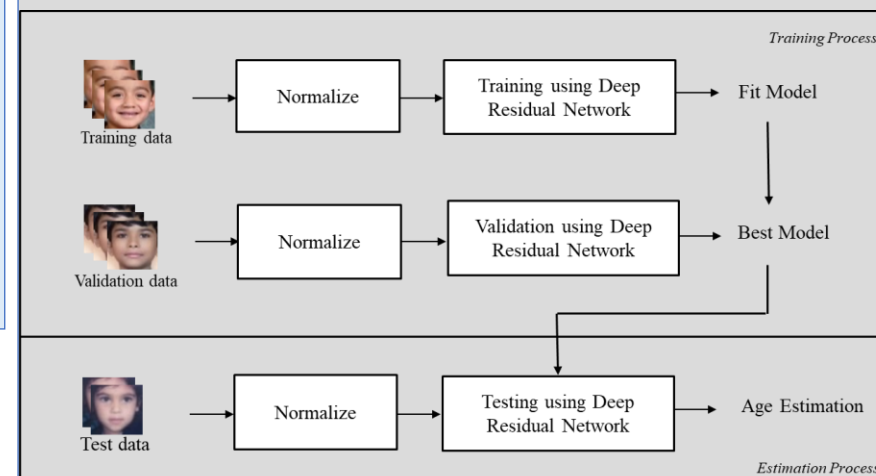
Carpal age estimation



Sign identification

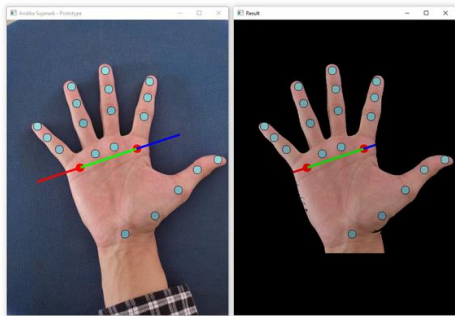
Genuine	Skilled forgery	Unskilled forgery	Random forgery
			
			
			
			
			

Face age estimation

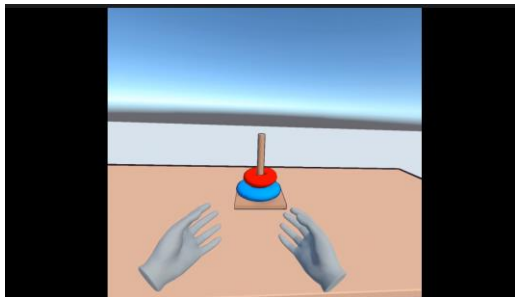


Collaboration Research

Prediction of Hand
Size For Hand
Disfusion Therapy

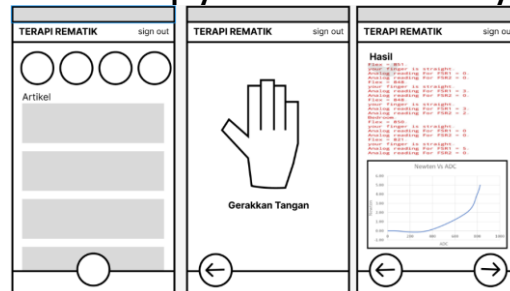


Virtual Reality Games
Hand Movements



PENALTY TEAM

Remote Wearable Intelligent
Glove Therapy Information System



Data Centric
Artificial Intelligent
and e-Business
System

AQUACULTURE

Totally integrated smart
aquaculture system for
Indonesia



Grant 2022

(Arna Fariza,
Rengga Asmara)

P2VUPT : Deteksi Otomatis Kelainan Gigi dan Jaringan Penyangga
pada Radiograf Panoramik Sebagai Alat Bantu Radiodiagnosis

(Hero Yudo
Martono, Reesa
Akbar, Fitri
Setyorini)

Penelitian Lokal PENS Skema Terapan: Merancang Image
Container Berisi Database High Availability dan data Warehouse
sebagai Platform as a Service berbasis Teknologi Cloud

(Yanuar Risah
Prayogi, Arif
Basofi)

Penelitian Lokal PENS Skema Terapan: Rancang Bangun
Perangkat Lunak Pembantu Skrining Katarak Berbasis Pengolahan
Citra Digital Berbasis Flutter



Target 5 tahun ke depan

- Radiodiagnosis and Dental Clinic Information System
- Landslide Mitigation and Evacuation System
- Visualization and Decision Support System for Endemic Diseases
- Integrated Human Identification System
- Smart Cataract Screening
- Platform as a Service based on Cloud Technology
- Stunting Decision Support System