Hanzel Petherson

Software Architecture, AI Engineer, Software Engineer

☎ +81 8048083772   @ hanselpetter0927@gmail.com   📍 Matsuyama Ehime, Japan

SUMMERY

Meet Hanzel, a seasoned AI/ML Python Engineer whose passion for artificial intelligence, machine learning, and natural language processing runs deep. With over 7 years of dedicated experience in AI and Python backend development, he's a maestro at harnessing cutting-edge tech for innovative solutions.

From a young age, Hanzel dreamt of becoming a cybersecurity expert, driven to thwart hacker attacks and create a fantastic AI/ML + Cyber Security product. His goal? Crafting an exceptional AI/ML security system, fortified by advanced artificial intelligence and machine learning techniques. This system would analyze data, spot anomalies, and adapt to new threats, safeguarding against cyberattacks and preserving sensitive data.

Yet, his journey began uncertainly, swayed by parental influence toward a medical career. But Hanzel chose to blaze a different trail, immersing himself in the world of computer science at a prestigious university. He excelled, specializing in web development and security, setting the stage for a flourishing software development career.

Through trials in both career and family life, Hanzel emerged triumphant, earning a reputation as an indispensable developer. Today, he remains unceasingly driven by a thirst for knowledge and commitment to staying at the tech forefront.

Hanzel isn't just a tech wiz; he's defined by his open-mindedness and unwavering enthusiasm, making him a valuable collaborator and team player. In essence, he's not just a developer; he's a person of exceptional character, uniting technical prowess with interpersonal finesse.

EXPERIENCE

Senior Full Stack Developer

Suzunoya K.K.   📅 01/2023 - Present   📍 Japan, Remote

🔗 https://www.suzunoya.com/

Suzunoya is a small and growing company that offers an educational service that focuses on efficiency in language learning.

· Planned, designed, and developed an innovative website using React.js, Angular.js, and Bubble.io to provide an interactive and seamless shopping experience.
· Developed a real-time server-client communication model using Socket.io for implementing a dynamic, AI-powered chatbot to enhance customer interaction.
· Constructed a visually appealing and user-friendly landing page using modern React.js features and UI/UX principles, which serves as the first point of interaction for users.
· Integrated the application with MongoDB for robust, scalable data storage and retrieval, leveraging Mongoose for object modeling and seamless data transition to and from the database.
· Leveraged AI frameworks to develop a versatile, responsive, and learning chatbot that continually adapts to customer interactions and inquiries.
· Successfully deployed the high-performing shopping platform on AWS for scalability, reliability, and robustness.
· **Technologies**: React.js, Angular.js, Bubble.io, MongoDB, AWS, Socket.io, AI and Machine Learning, Web Development, RestAPIs, Microservices, CI/CD Pipelines, GitHub, Web Sockets, Nginx, Linux, Docker.

LANGUAGES

Malay	Native
English	Proficient
Japanese	Proficient

EDUCATION

Bachelor Degree in Computer Science

Universiti Sains Malaysia

GPA
3.3 / 4.0

📅 2013 - 2016
📍 Penang, Malaysia

SKILLS

Language

Python   Go   Javascript   PHP

C++   C#   Java

Frameworks

Django   Flask   FastAPI   Node

Express   Nest.js   React   Next.js

Gin   Beego   Angular.js   Bubble.io

Wordpress   Vue.js

Libraries/APIs

Fast.ai   PyTorch   Lightning

Rest APIs   Keras   TensorFlow

Scikit-learn   OpenCV   SQLAlchemy

Pandas   Numpy   PySpark   NLTK

SpaCy   Google Vision API

EXPERIENCE

AI/NLP Engineer | Backend Developer

Makebell   📅 10/2022 - 01/2023   📍 HongKong, Remote

🔗 https://makebell.com/

Makebell is a big data-and AI-powered company dedicated to helping make complex legal, technical and patient documents easier tounderstand and easier to review and edit

- Designed and implemented a machine learning system that recognizes and extracts meaningful information from accounting documents using deep learning algorithms.
- Designed and implemented ai document review system that detect translation errors of the company fund documents.
- Designed and implemented highly scalable, reliable, and distributed back-end services using Python, FastAPI, Celery, Redis, and MongoDB to process incoming data in real-time.
- Played a key role in developing RESTful APIs using Python frameworks like Flask, ensuring efficient processing document extracting, pairing, reviewing, evaluate translation quality.
- **Techchologies :** Python, Data Science, Data Extraction, Machine Learning, Alibaba Machine Learning, Google Cloud Machine Learning, Data Engineering, Architecture, AI Design, Web Security, Nginx, DevOps, Linux, Docker, Jupyter Noteboo, React, Javascript, Document Extracting, Sentence Transformer, Pytorch, Bert Model, RestAPIs, Web Development, Deep Nural Networks, Github CI/CD, SQLAlchemy, Postgres, Numpy, Pandas, AWS Lamda

Sr. Backend Developer | AI Engineer

Laskie   📅 06/2021 - 10/2022   📍 USA, Remote

🔗 https://laskie.com/

Laskie is hireing platform that provides a tech talent recruiting service. The platform was acquired by Twitter in 2023

- Designed the matching algorithms combined with people power, aka Sources, to find and vet technical talent.
- Designed and Implemented machine learning search and matching architecture to provide candidates.
- Spearheaded a modernization of the development process by establishing the brand-new roles of DevOps and SRE, which resulted in a faster process of releasing the changes into production.
- **Technology**: Python, Golang, Data Science, Machine Learning, Elasticsearch, Google Cloud Machine Learning, Data Engineering, MongoDB, Micro Services, Scrum, CI/CD Pipeline, Docker, Docker Compose, Nginx, AI design, PySpark, Web Security, GraphQL, Rest, Pytorch, Flask, Santic Web Server, Pytest, SQL, Linux, Natural Language Toolkit(NLTK), Deep Nural Networks

AI/ML Engineer | Backend Developer

Cromai   📅 09/2018 - 06/2021   📍 Sao Paulo, Brazil

🔗 https://en.cromai.com/

Cromai takes agronomic management to the next level of efficiency with digital solutions based on artificial intelligence.

- Designed Georeferenced identification of weed group in sugarcane fields using Deep Learning and OpenCV
- Designed and Implemented computer vision software capable of fast, accurate, and early diagnosis to increase efficiency of producers in the agriculture industry
- Designed and Implemented image processing and data analysis system with Python, OpenCV, Machine Learning, PostgreSQL
- **Technologies :** Python, Flask, SQLAlchemy, OpenCV, DeepLearning, MLOps, Architecture, Hardware, Google Vision API, C++, Computer Vision Algorithms, Data Analysis, Pandas, Pytorch, Numpy, Matplotlib, Seaborn,

SKILLS

ML/NLP

Neural Networks | Classification | NER

Sentiment Analysis | OpenAI | GPT4

Claude 2 | LLama | Langchain

Streamlit | Torch | Sound2Text

OCR | Image Recognition

Hugging Face | Data Modeling

Data Analysis | Algorithm | MLflow

Image Analysis

Platforms

Docker | Jupyter Notebook | Azure

AWS Lamda | GCP | Digital Ocean

Cloudflare | Godaddy | KaliOs

Paradigms

Data Science | REST | CI/CD

Test-driven Development(TDD) | Agile

Scrum | DevOps | Microservices

Management | ETL

Storage

Amazon S3 | PostgreSQL | MongoDB

MySQL | Redis | Elasticsearch

Databases | Database Modeling

Google Cloud | Amazon Cosmos DB

EXPERIENCE

Software Developer

Individual   📅 07/2017 - 09/2018   📍 Tokyo, Japan

🔗 http://www.individual-inc.com/

Individual provides Development of IoT devices, hardware infrastructure control software & Mobile Apps & Web Apps.

- Served as a Full Stack Developer at Individual, focusing on node-based frameworks for web development.
- Contributed to the end-to-end development of web applications using frameworks such as Express.js and Node.js, ensuring seamless integration of
  front-end and back-end components.
- Demonstrated proficiency in database management using frameworks like
  MySQL, effectively handling data storage, retrieval, and optimization for
  application requirements.
- Developed an internal system for objective quality measurement of the full-text search system. It allowed product managers to focus on important features with the most benefit for the end-users.
- Actively engaged as a team player, collaborating with cross-functional teams, and actively contributing to team discussions, problem-solving, and
  delivering high-quality solutions.
- **Technologies :** Node, Express, Nest.js, React, Typescript, Redux, Tailwind, Bootstrap, SSR, Webpack, MongoDB, PostgreSQL, Firebase, Apache, Nginx, Javascript,CI/CD, Web Security, Pen testing

Junior Software Developer

Sendyou   📅 08/2016 - 07/2017   📍 Tokyo,Japan

🔗 https://sendyou.jp/

Sendyou provides customer acquisition tools for cram schools and after school activity providers.

- Joined Sendyou Company as a web developer intern, with a focus on networking and Python, Django web development
- Collaborated closely with the development team, participating in the planning and execution of web development projects.
- Actively engaged in troubleshooting and debugging tasks, working closely
  with senior developers to identify and resolve issues.
- **Technology :** Python, PostgreSQL, MongoDB, Flask, Javascript, React, Backend, Software Architecture, Bootstrap, Node.js, MySQL, Data Modeling, Databases, Nginx, Apache, Rest APIs, C++, SQLAlchemy, Full-Stack, ETL, APIs, Test-driven Development

SKILLS

Other

Web Scraping   Data Mining

Automation   Big Data Processing

BERT   ChatGPT   OpenAI   NLP

Security   Firewall   IDS

Real-time Data   Github Action

Object Detection   CCTV

Pre-trained Transformer 3(GPT-3)

Vertex   Vertex AI   DVC

Data Versioning   MLEM

Handwriting Recognition

Robot Operating System   Raspberry Pi

Arduino   STM32