# **Eunico Cornelius**

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# **Software Engineer | Tech Enthusiast**

Fullstack (MERN) | Game Developer (Unity) | Mobile Developer (Flutter)

I am a graduate software developer with 7+ years of experience using technologies such as JavaScript, Python, C#, and Dart. Recently, I have been digging deeper and focused into front-end development using ES6, ReactJS (CSR), NextJS (SSR), Redux (State Management), and Tailwind (CSS), backend development using NodeJS, Express, and MongoDB, deployment using Vercel, Heroku, and GH-Pages, version control using Git, Unity, C#, and XML for game development, and Flutter (Dart) for mobile. Striving to make beautifully built software, I incorporate design and prototyping into my software development using Figma. I also love to learn new technologies to give life to new ideas, which is why I am having fun trying out ThreeJS on the side to make use of WebGL to show 3D models more efficiently in websites.

Feb 23 - Present	Student, Master of Software Engineering	University of Melbourne	
Jan 21 - Sep 22	Content Developer	Labster ApS	
Jun 20 - Sep 20	Full Stack Developer	PT. Cognixy	
Feb 19 – Jul 20	Research Assistant / Software Developer PT. Inti Sinergi Teknologi		
Mar 18 - Aug 18	Full Stack Developer Intern	Seriotec GmbH	
Nov 16 – Feb 17	Web Developer Intern	PT. Indocement Tunggal Prakarsa	
Aug 15 - Aug 18	Bachelor of Information Technology & Bachelor of	Swiss German University & Fachochschule	
	Engineering	Südwestfalen	

### **SKILLS**

Programming Languages	Years of experience	Self- Rating	Applications & Tools	Years of experience	Self- Rating
JavaScript	5*	***	Figma	3	****
HTML/CSS	7*	***	Microsoft Office	15*	****
XML	3	***	JIRA / Trello	4	***
ReactJS	3*	***	Git	5*	***
Redux	1*	*	Unity	3*	***
Python	3*	***	Docker	1	*
React Native	1*	*	Processwire	1	*
PHP	2*	**	Android Studio	2*	**
Java	3*	**	Adobe Photoshop	8*	***
C#	4*	**	VSCode	5	***
ASP .NET	1	*			
VueJS	1	*			
Flutter	1	**			
MySQL	4*	**			
MongoDB	2	**			

<sup>\*</sup> Includes academic experience

- Programming: Javascript, HTML/CSS, ReactJS, Redux, Python, React Native, PHP, Java, C#, ASP.net, VueJS, Quasar, Flutter, MongoDB, XML.
- Software/Libraries: Git, Bitbucket, Unity, Docker, Processwire, Android Studio, Xcode, Adobe Photoshop, Microsoft Office.
- Packages: Tensorflow, pandas, Keras, matplotlib, opencv, octave, scikit-learn, tesseract, Flask, Jquery, Cypress, D3JS, Werkzeug, Bcrypt, FlaskJWT.

Content Developer

- Succeeded in boosting production efficiency by 300% using team coordination and agile methods using Jira (SCRUM and Kanban).
- Developed, managed and released into production more than 30 higher education simulations with topics in natural sciences including stereochemistry, synthesis of aspirin, melting point apparatus and more with accessibility friendly features via XML and Unity.
- Built reusable code templates and building blocks that are reusable developers to quickly implement for multiple other simulations.
- Fixed bugs, version controlled, and maintained on 20+ simulations that satisfy quality assured standards for production.

## Cognixy, Jakarta - Software

June – September 2020

Full Stack Developer

- Developed an Intelligent Attendance System that utilizes neural networks to detect human beings and their thermal signatures to prevent covid spread with Python (Flask), ZMQ, Redis, MySQL, Quasar and VueJS.
- Built attendance mailing system that envelops NN model above to notify employers of COVID symptomatic employees.
- Product bought by ShapesAl and used for COVID awareness in London, broadcasted on BBC. -- <a href="https://www.shapes.ai">https://www.shapes.ai</a>.
- Designed and developed UI for mailing system frontend.
- Integrated image recognition API into the mailing system interface.
- Developed E2E CI/CD workflow using bitbucket pipelines with Cypress for automation testing per container.
- Created D3JS dashboard that warns COVID risks in train stops for Indonesian Railway Company (KCI).

## PT. Inti Sinergi Teknologi, Jakarta - Software

February - June 2019, May - July 2020

Research Assistant / Software Developer

- Developed an end-to-end machine-learning app using Python, Tensorflow, and Keras, converting physical photo IDs into digital text.
- Single Handedly built a self-developed CRNN neural network with an accuracy of 95% that is the central piece of the photo ID app.
- Created the web interface for the machine learning model in Flask / HTML enabling users to use the ML tool in real-time.
- Submitted a white paper with a team of three, containing technical findings of the neural network project.
- Built machine learning model that converts images of electricity meters (PLN) into digital form with 80% accuracy using 1 million+ self
  annotated image data.
- Built backend server REST API to serve the model above and company projects using MongoDB, Werkzeug, Bcrypt, and FlaskJWT.
- Conducted user load testing on docker swarm using locust and multiple docker containers with 6 nodes (1 manager, 5 workers).

### Seriotec GmbH, München, Germany - Media/Film

March - August 2018

Full-Stack Developer Intern

- Built and optimized the front-end features for the company website using HTML/CSS, PHP, JS with Processwire -- <a href="https://yamdu.com">https://yamdu.com</a>.
- Developed live news feed feature for the company, displaying recent news and other web-app information -- <a href="https://Deinkinoticket.de.">https://Deinkinoticket.de.</a>
- Created and trained a chatbot in Facebook Messenger that allows customers to purchase cinema tickets via Facebook.

#### PT. Indocement Tunggal Prakarsa. Tbk, Jakarta - Cement Company (IT Division)

November 2016 - February 2017

Web Developer Intern

- Introduced and created ASP.NET C# as front-end replacement for better dashboard performance and real-time data.
- Improve web supervision of 50+ cement factories by providing real-time data using SignalR.
- Single handedly created a new chat feature for improved communications via dashboard between factories.

## **PROJECTS**

# Game-a-thon – Organizer and Designer of a Programming Contest

September 2016

- Organized a video game programming competition that was attended by 600+ high-schoolers from over 22 schools.
- Led game programming workshops for 100+ students using *Gamesalad* -- a game development tool for beginners.

# **VR Exhibition**

October 2017

Developed in Unity and C# a VR showroom app in a team of three, enabling users to build, customize, and view their dream car.

#### **Personal Projects**

April 2020

Created React Native game (Expo) and created a developers forum using MERN stack development (MongoDB, Express, ReactJS, NodeJS).

#### **EDUCATION**

# **B.S. Information Technology:** Swiss German University, Alam Sutera, Indonesia

August 2019

- Subjects: Artificial Intelligence, Software Engineering, Databases, OOP, Web Systems and Technology(GPA: 3.5/4.0).
- Publication: Purnama, James, Galinium, Maulahikmah, Cornelius, Eunico. (2019). Development of Convolutional Recurrent Neural Network (CRNN) deep learning model for Indonesian optical character recognition back end web service. Swiss German University.

B.Eng. Engineering Management: Fachochschule Südwestfalen, Iserlohn, Germany