# Julien Look

# Software Engineer

LinkedIn: https://www.linkedin.com/in/julien-look/ | Github: https://github.com/juice1000

#### SKILLS

#### **Data Science & Machine Learning**

Machine Learning (LLM, CNN, Classification, Time Series, Regression, Reinforcement Learning); Data Engineering (Big Data Mining, ETL); Data Quality (evidently.ai, deepeval) Libraries (Tensorflow, Keras, Pytorch, Pandas, Scikit-Learn, Tidyverse, OpenCV, Apache Spark, langchain, chroma)

# **Software Architecture/ Deployment**

Monorepo (NX); Microservices; Version Control (Git) Cloud Services (Firebase, Microsoft Azure, AWS); CI/CD (Github Actions, Gitlab CI/CD; Expo, Docker, MLOps (Amazon Sagemaker, mlflow, DVC, deployment), Workflow Management (Airflow)

#### **Frontend Development**

SASS; Web Scraping (Selenium, XML, beautiful soup); GraphQL; JQuery; Websockets (Socket.io); E2E Testing (Cypress); UI kits (Tailwind, Bootstrap, Material UI, headlessUI, CoreUI); Module Bundler (Webpack, Vite); RxJs; REST; Server-Side-Rendering; Caching

#### **Backend Development**

Server Framework (Express, Restify, Flask); Serverless Development; Threading; Multiprocessing; Database Management (MongoDB, ORMs, dbt, Prisma, Redis, Big Query); Unit/Integration/API Testing (Jest, Python unittest); Authentication (JWT, Oauth)

#### **Programming Languages**

Web (JavaScript, React, Remix, Angular, HTML, CSS); Backend (Node.js, TypeScript, Bash); Data Science (Python, R, SQL); Mobile (React Native)

#### Languages

German (Native Proficiency) English (Full Professional Proficiency) Japanese (Professional Working Proficiency)

#### EXPERIENCE

#### Adjunct Lecturer in MLOps, Nobleprog, Freelance

Concepted and taught lessons in MLOps (Machine Learning Operations), covering automated data wrangling, machine learning lifecycles, monitoring, and orchestration in production environments

Developed hands-on labs with real-world case studies, guiding students through opportunities and pain points in MLOps, covering a range of modern tools

#### Jan-Feb, 2025 remote

### **Lead Frontend Engineer**, R-Cycle, Freelance

Spearheading development of customer dashboard to monitor plastic production cycle across multiple manufacturers, facilitating industries' compliance with government recycling mandates Jan, 2024 remote

Jan-Dec,

- Directed architectural improvements, including Workspace refactoring for optimized development
- Engineered Frontend components utilizing React, SASS, and CoreUI for a responsive user interface
- Implemented a comprehensive testing strategy to ensure stability in previously untested application
- Transformed database and file management using GCP, prompting users to customize the app UI

#### **Software Engineer**, Cinoware, Freelance

Build prototypes and automated testing software to validate a product used for telecommunication

2024 Developed a remote robot operation application, featuring a React.js console for command issuance remote

- Implemented Backend in Python and Flask for machine control and collecting operation data
- Implemented navigation tracking through image detection using OpenCV
- Orchestrated pipeline for algorithm performance tracking using mlflow and scikit-learn
- Developed a Selenium Grid testing suite, analysed Allure reports for performance tracking

### Adjunct Lecturer in Data Analytics, Data Smartpoint, Freelance

Taught Data Analytics, Machine Learning, Web Scraping and API development to groups of ~15 students, including conceptualization of study material and final projects

Jun-Oct, 2024,

remote

<ul> <li>Lead Fullstack Engineer, Full-Circle Family, Freelance</li> <li>Spearheaded the development of an AI parent advisor using OpenAI's GPT models and WhatsApp API, offering affordable child care support</li> <li>Led the strategic implementation of LLM models for AI-chatbot product development, supervising domain-specific training and optimizations</li> <li>Architected and scaled applications using microservices, NX Monorepo, and AWS, improving product flexibility and resilience</li> <li>Designed a TypeScript and React.js-based Analysis Dashboard to track user behavior, informing data-driven product strategy adjustments</li> <li>Leveraged a broad spectrum of AWS tools (including Identity Management, Lambda, API Gateway, DynamoDB, ACM, Route 53, Amplify, Cognito, Elastic Beanstalk, EC2) for robust cloud infrastructure</li> </ul>	Nov, 2023 - Mar, 2024 remote
<ul> <li>Lead Fullstack Engineer, Cybercrush, Freelance</li> <li>Engineered a Shopify Storefront utilizing Remix.js (Hydrogen) and Shopify APIs with GraphQL for a seamless e-commerce experience</li> <li>Led and managed a team of 4 developers, overseeing the delivery of design and technical requirements in collaboration with C-level executives</li> <li>Provided administrative support on the Shopify platform, including product release strategy consultation and implementation of a CI/CD pipeline with GitHub Actions</li> </ul>	Dec, 2023 - Jan, 2024 remote
<ul> <li>Frontend Engineer, Freelance</li> <li>Developed a time management tool for SME using React, Tailwind and headlessUI</li> <li>Utilized Firebase for authentication and database management, used Cloud Functions for Serverless Architecture</li> <li>Set up CI/CD pipeline in Gitlab for faster and more reliable releases</li> </ul>	Oct, 2023 remote
<ul> <li>Fullstack Engineer, kunveno, Freelance</li> <li>Developed and integrated a Full-Stack app into Microsoft Teams as a Message Extension using, expanding client's user potential to 270 million worldwide, capturing a substantial market share</li> <li>Architected the Microsoft Azure environment as the lead developer, managed CI/CD pipeline and release of multiple stages, collaborated with CTO for peer-reviews</li> <li>Customized backend in Node.js and TypeScript to utilize Microsoft Bot framework requests</li> <li>Built UI from Figma template using vanilla JavaScript</li> <li>Implemented organization-wide authentication via Microsoft Azure's delegated OAuth protocol and Azure AD, overcoming complexities of using the Microsoft Azure through careful documentation review and proof-of-concept testing</li> <li>Overcame infrastructure challenges by optimizing file structure and configuration files for extension, ensuring seamless app functionality and data access within the extension</li> </ul>	Jun - Aug, 2023 remote
<ul> <li>Fullstack Engineer, Listify, Personal Project</li> <li>Developed a Full-Stack App that downloads tracks of Spotify playlists on Spotify, enabling DJs to create DJ sets faster and save on cost</li> <li>Used Python with Flask and FastAPI for App architecture, Celery and Redis for asynchronous tasks</li> <li>Used Selenium and Beautiful Soup for dynamic Web Scraping of data</li> </ul>	Jan, 2023 Berlin, Germany
<ul> <li>Data Scientist, Expresssteuer GmbH</li> <li>Managed ETL processes &amp; rebuilt Data Warehouse, reduced original database costs by more than 90%</li> <li>Implemented Microservices coupled with Cloud Services using Firebase in Angular and Typescript</li> <li>Built solutions using AI tools to cut labor cost by about 90%</li> <li>Created analytics tools for data driven workflows</li> </ul>	May, 2021 - Dez, 2022 remote
<ul> <li>Data Science Research Assistant, Technical University Berlin</li> <li>Conducted Machine Learning research in Quality Science, used Python and R for implementation</li> <li>Contributed to paper publications, created interactive content for congresses (e.g. VDI congress)</li> </ul>	Sep, 2020 - Sep, 2021 remote
<ul> <li>Machine Learning Engineer, Cyanite, Freelance</li> <li>Modeled several Machine Learning prototypes to classify music eras with Python and Tensorflow</li> <li>Generated and managed audio data library with pandas, created spectrograms from audio</li> <li>Implemented vanilla Machine Learning (MLP), Image Classification (CNN) and Time Series Classification (Recurrent CNN) models to analyze audio data</li> <li>Programatically tuned hyperparameters during model evaluation step to find optimum</li> </ul>	Jun, 2020 - Nov, 2020 remote
<ul> <li>Operating System Engineer, Bosch, Internship</li> <li>Linux OS Development for Bosch's Linux distribution (Bash and Python)</li> <li>Implemented verification step for untrusted software during OS installation</li> </ul>	Sep, 2019 - Mar, 2020 Singapore

#### **EDUCATION**

# **Course Program - Software Engineering Immersive,** *Codeworks*

- Advanced Javascript paradigms, Backend frameworks, Frontend frameworks
- Developed 3 senior projects from ideation to release, gaining advanced experience in Software Architecture
- Developed a Mobile Music Streaming App using React Native, Expo and Websockets
- Developed a customizable AI-powered automation tool using Node.js and React, spearheaded architecture setup, Cloud Infrastructure, Database Management, Websockets
- Developed a live voting App for Spotify playlists using Node.js, Angular and TypeScript

# **Bachelor of Science - Computational Engineering Science,** Technical University Berlin

- Grade: 2.1, (equivalent to a GPA of 3.1 or a score of 86%)
- Bachelor Thesis on Advantage Actor-Critic Reinforcement Learning, grade: 1.3
- Studied Computational Mathematics using Python (1 year)
- Participated for several semesters in projects using Machine Learning with Python

Feb - May, 2023 Berlin, Germany

> Apr, 2018 -Aug, 2021

Berlin, Germany