IR. ADRIAAN DE BOLLE

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‣ Summary

Preferred cross-functional position triggering my engineering intellect and digital focus.

Entrepreneurial engineer looking for an opportunity such as Solutions Architect, Project Manager, Business Analyst or other.

‣ Personal projects

UNBLND (FOUNDER), MEETING PLATFORM — 2019 - ONGOING (WWW.UNBLND.COM)

- Platform to meet people without superficial judgment, partner of AWS Activate Program;
- Automated proposals of relevant interest groups based on interests;
- Figma designs, Laravel backend, Vue.js, Blade templating, ReactNative app development.

UNBLND is live! Currently, our meeting platform aka blind group dating to make friends is available. Our mobile app is ready to download on Google Play and App Store. With very few limited resources we are able to support a social community where people can find each other easily. Due to the pandemic situation in 2020 we even tweaked our platform to make it possible to host video chats online and be part of global groups like online cooking and online gaming.

For this personal project I am the idea generator, solutions architect, UX/UI designer, marketeer, recruiter, team manager and more. The idea of UNBLND came to mind thanks to all the trouble and hassle my friends and I endured to find friends and dates with common interests. Online you can only find superficial dating apps. I believed it could be done differently, starting from interests instead of superficial pictures. This would mean you would meet people with common interests in group, creating a basis to start new and meaningful friendships. I started from a blank page imagining and then wire-framing the ideal app. I designed a prototype using Figma, an online design tool. The whole web platform is developed using the frameworks of PHP Laravel and VueJS. I made a backend setup within an AWS EC2 instance with LAMP server configuration. Having a web-based platform and testing with a real audience gave me insights to start building a mobile application using ReactNative, a cross-platform JavaScript framework. For mass-marketing mails, I chose a setup with AWS SES and AWS Lambda forwarding. I automated deployment using AWS CodePipeline with versioning, security policies (teams) and defining scripts within .yml files running at specific build events. I followed workshops through the AWS Activate Program tackling trending subjects such as machine learning (AWS SageMaker). During this whole adventure, I selected and recruited Erasmus Interns to work on the design, video-editing, mobile app development and marketing in team. Furthermore, I presented the idea on stage at WebSummit in Lisbon (click this link to watch).

ADRIAANDEBOLLE.COM

adriaandebolle.com created using serverless AWS S3 bucket hosting, CodePipeline and Cloudfront resulting in a minimal cost of €12/year (domain).

VIRTUAL WHISKY TASTINGS

thewhiskyhouse.com/shop (2020)

Convert an existing reservation tool within a short timeframe to facilitate online shopping and organize virtual tasting moments. Make surveys (Typeform) to understand customer needs and use Mailchimp and Zapier to automate marketing and inform tasters.

BEST2NEST — 2015 - KILLED

- Fully self-managed project from scratch
- Algorithmic neighbourhood search engine based on personal interests;
- Google Places API, pure PHP - without framework, GIS, PostgreSQL, maps & visualization overlays.

During university I already thought about improving quality of life, especially our student life. Moving to Canada for one year in 2014 learned me a lot, but I faced many issues. Therefore, I learned how to gather and collect massive amounts of data. I stored on a self-managed Virtual Private Server (VPS) millions of Points of Interest (POIs) by running automated scripts. I converted this raw data into a scoring system and visualized these scores as a colourful overlay onto Google Maps showing the best neighbourhood for someone's interests. This whole project showed great skills of self-learning and positivity towards self-development.

‣ Employment

SOLUTIONS ARCHITECT & BACKEND ENGINEER, ROXI (STARTUP); *SINT-NIKLAAS, BE* — AUG 2020 - OCT 2020

- Graphql API, nodeJS, AWS cloud management (mobile app, freelance, set on-hold)
- freelance contract

My responsibility at Roxi was to take the lead in the development of database management and Android development. My advice for the future was to use ReactNative as cross platform technology. I created an Entity Relationship Diagram (ERD) to fully understand the needs for the new database and structure all actors in a robust system. Then I build up a Graphql API with PostgreSQL database within AWS cloud environment. The algorithm needed to handle lots of geographical data. With this in mind and the possible necessity of irregular data fields I selected PostgreSQL as database technology. The project has been put on-hold 5 months before its deadline making it impossible to fully finish the project.

SOLUTIONS ARCHITECT & CTO, RELOTRUST (STARTUP); *BRUSSELS, BE* — OCT 2019 - MAR 2020

- Building a corporate relocation management system (www.relotrust.com);
- Infrastructure from backend to frontend & manage student interns;
- AngularJS, NodeJS, ReactNative (javascript frameworks), AWS Cloud Services.

My job at Relotrust was to take the lead in the technical development and be the architect of the corporate relocation management system which would form the basis of the business. I was responsible for the entire technical development as Chief Technical Officer (CTO), within a startup environment. I was the solutions architect to determine how we would build our B2B product for the *Global Mobility* department of international companies. I started by creating a static prototype developed with AngularJS and AWS Beanstalk. I also build a complete setup of NodeJS backend service from scratch using an AWS EC2 instance, AWS MySQL RDS and load balancer to redirect traffic routed from relotrust.com/api. To increase functionality we had to stop using the "fake backend" within the Angular project. To accomplish this I integrated the frontend prototype with the created API service to go from a static prototype to a fully functional, dynamic platform. To create a user-friendly environment for the end-user (expats) I developed a

ReactNative mobile application and integrated it with the same API service. At the same time, I managed junior interns doing tasks related to further frontend development. For every problem or technical challenge I gave them guidance and expertise to find appropriate solutions. Throughout the entire development process, the CEO and I also visited prospects and suppliers to understand their needs and integrate these insights with the ongoing development, adding extra functionality and features.

BUSINESS ANALYST & SOFTWARE ENGINEER, BAKERONLINE (SCALEUP); *UTRECHT, NL* — AUG 2018 - FEB 2019
- Reduction of onboarding time by automating workflow (www.bakeronline.com);
- Business strategy, Sales & Marketing, Laravel PHP, VueJS, Docker
- Erasmus for Young Entrepreneurs

At BakerOnline I had to optimize their business flow. Thanks to my engineering background I had the best expertise to analyze the business from an outside perspective. I gathered information from the Sales team joining them on client visits, discussed with marketeers, watched how Customer Support dealt with clients and dove into the digital platform. I mapped the current state of the onboarding process of new clients and internal workflow. Then, I created a plan to reduce onboarding time and to automate their internal workflow. I made a presentation showing the need for additional database requirements and visualized these needs using ERD (Entity Relationship Diagram) making it easier for non-technical people to understand the plan. Everyone was on board and felt confident about the approach and believed this change would impact the business performance heavily. I implemented the required backend changes to the existing PHP Laravel platform. I also implemented the required frontend changes using VueJS and blade templating. After this, I gained more Sales & Marketing experience including time-to-market, digital commercialization and more. I had lots of business discussions with the CEO, Maxime Sergeant, to understand business challenges and opportunities. This whole adventure was part of *Erasmus for Young Entrepreneurs* and I explained it on *Kanaal Z*, a Flemish tv broadcaster for economic news (click this link to watch).

VALUE STREAM ENGINEER & CHANGE MANAGER, PALL (DANAHER); *HOEGAARDEN, BE* — FEB 2017 - FEB 2018
- Combination of project management and business analysis (www.pall.com);
- Communicator between Production, Quality, Sales and Logistics;
- Successfully redesigned the production procedure to solve a complete production breakdown;
- SAP, Visual Basic, Value Stream Mapping, Problem Solving Process (PSP), Obeya, Kanban.

As a value stream leader, I was the leading expert on two specific products (single-use bioreactors) and their process journey across different departments, from resources to sellable end-product. For the optimization projects it was necessary to make data comprehensive to facilitate decision making amongst all stakeholders. To achieve this, I managed an Obeya room -Japanese for large room- where all projects related to my products were visualized on the wall. Furthermore, I had to build a strong collaboration with our suppliers to understand input of our value stream (resources) and visit clients and talk with salespersons to ensure a qualitative output of our value stream (product). To facilitate process improvements I pulled all relevant data from SAP to analyze the Bill Of Materials (BOM), production planning, suppliers, and clients. Within the assembly process of the bio-container we optimized and smoothened flow between the warehouse and production using Kanban -Japanese for cards or signboard- to improve efficiency. Because of a production breakdown, I redesigned the production procedure for the assembly of bio-containers and got production running again. I also automated the internal logistics process moving from physical paper to a shared drive Excel form with integrated control, interfaces and customization using VBA. Due to an increase in demand, I also analyzed the production flow to find optimization opportunities. To implement the necessary changes for this optimization I organized improvement projects and team workshops with experts and operators to find solutions. By doing this we increased weekly production output successfully, meeting the new demand.

GENERAL PROCESS OPTIMIZATION INTERN, BASF SE; *LUDWIGSHAFEN, DE* — JUN 2015 - AUG 2015
- Interpret historical data of plant processes (www.basf.com);
- Formulate real-time energy efficiency in function of external and internal parameters;
- Programmatic conditions, KPI visualization, large datasets (MES Siemens).

During my internship in Germany it was clear that engineering and IT is a great mix to build amazing tools. My assignment was two-folded. I had to understand all (chemical) processes in the production chain of producing Ethylene Oxide (EO) and then map energy efficiency in function of important parameters. This mapping needed to be clearly visible for operators within a real-time dashboard. Operators could follow how well they are performing in terms of energy efficiency. Real-time or averaged per shift one could see a percentage, for example 80% energy efficient. I developed a complex formula in function of external parameters, such as river water temperature and outside temperature based on historical data. Depending on these external parameters the energy usage operates within a window of possible values. During the summer it is required to put more energy into cooling thus moves the window to more energy usage. The number 80% means that the current energetic usage is 20% higher than the lowest possible energy usage within the window of similar situations. I had to implement my model and create new dashboards within the existing Manufacturing Execution System (MES).

‣ Education

SEP 2011 - JUN 2016
KULEUVEN, *Leuven, Belgium;*
***EXCHANGE YEAR:* POLYTECHNIQUE DE MONTRÉAL,** *Montréal, Canada*

- **Major:** (MSc) Master of Science of Engineering (Chemical Technology)

- **Programming:** Matlab, Python, Java, Algorithms, Networks, Data structure & analysis, CFD Simulations

- **GE:** Computer Science, Decision making, Numerical Mathematics, Problem solving, Innovation

- **Language of instruction:** English (1y), French (1y) and Dutch (3y)

‣ Skills

- Software:
  advanced: JavaScript, Git, Cloud (AWS), PHP, MySQL, HTML, CSS, SAP, VBA, PostgreSQL
  familiar: MES, BoxCox, Machine Learning, Liquid (Shopify), Python, Swift, C++

- Soft: multi-disciplinary communication, project management, time management, presenting in front of an audience, proper work ethic, enthusiasm, team work

- Language:
  distinguished: Dutch, English, French
  advanced: German, Spanish
  novice: Chinese