CURRICULUM VITAE

JĘDRZEJ LEWANDOWSKI

FULL STACK DEVELOPER/ARCHITECT AND MEDICAL STUDENT

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https://github.com/jblew • https://jblew.pl • birth date 05.06.1995

Motto: "Man Has No Good in Himself and Can Glory in Nothing" ~ Thomas. A. Kempis, The Imitation of Christ.

EDUCATION

2014 - PRESENT — MEDICAL UNIVERSITY OF WARSAW, SECOND FACULTY OF MEDICINE, POLAND.
Currently studying medicine, expected to graduate in 2021.

IT WORK EXPERIENCE

- 2004 – 2017: Self taught programmer
- 2016 – 2018: Chief of IT department in ACA Soli Deo (non-profit)
- Mar 2018 – Aug 2019: Architect and full-stack developer of WISE system in wise-team.io
- Sep 2019 – today: Typescript full-stack at Pitchup.com

(experience? Check out codersrank and github to see my open source work)

IT PROJECTS

2004 - 2017 — SELF-TAUGHT PROGRAMMER.
I was passionate about software development and studying algorithms since childhood, did thousands of hours of hobby programming. Most important hobby projects:

- 2006-2016: **Websites for local organizations**. Webdesign + backend. Stack: *HTML/CSS, PHP/CakePHP, Worpdress (custom themes, custom plugins) + GIMP + Corel*
- 2009: **Mailing system for local hospital**. Biggest challenge: cooperation with IT
- 2008-2012: **MUD (text-based online multpliayer game)** — the biggest hobby project. It consisted of almost 60ksloc over 5 versions. I have learned advanced OOP design patterns and tested multiple distributed app design approaches (lifecycle, eventbus, reactive/observable). Latest version included an experimental 3D client written in Unity. Stack: *SVN->Hg->GIT, Java SE, advanced concurrent programming, Jetty/Netty, custom WebSockets, SQLite, PostgreSQL, SSH, remote deployment.*
- 2015: **Distributed photo library system**: Management of huge photo library distributed over several external HDDs. The main tasks of the system were: segregation by event, removing duplicates, synchronizing the primary-backup hdd pairs, keeping central index. Stack: *Java SE/Swing*
- 2015-2017: **domestic heating management system**. Stack: *ESP32, ST ARM, Java SE, RabbitMQ, mesh networking*

2016 - 2018 — CHIEF OF IT DEPARTMENT AT ACADEMIC CATHOLIC STUDENT ASSOCIATION ASK SOLI DEO (NON-PROFIT) .
Projects made at ACS Soli Deo include but are not limited to:

- Designing the website solideo.pl (which required custom backend) and posters for events.
- Implementation of HR and internal assets management system based on NextCloud.
- Music driven lighting system for big events (150+ participants). One of the responsibilities I have had at Soli Deo was to design and supervise lighting and sound equipment at events. As a hobby project, I have created a lighting system for large halls. This was a software and hardware project. A software DSP module was doing spectral analysis and feeding RGB data into a hardware modules. Hardware was the most innovative part of this project. I have developed an extremely cost-effective way of sending real-time RGB signal over long distances with minimal noise (instead of using voltage-driven DMX that requires shielded and capacity-adjusted expensive cabling, the system was using a current-loop circuits for which a flat telephone cable is enough to carry the signal).

2018 - TODAY — ARCHITECT AND DEVELOPER OF WISE AT WISE-TEAM.IO

***Stack**: Steem blockchain + Typescript/Node.js/browser + Vue.js + Docker/swarm + PostgreSQL/PostgREST + Redis/socket.io + Hashicorp Vault + Travis + Ansible + Logz.io*

Wise-team.io (https://wise-team.io/) is a blockchain startup. We run a Steem blockchain witness node and maintain two decentralized apps for Steem blockchain: Engrave and Wise. I am the architect and the leading developer of the WISE system. Wise is a platform that allows steem users to delegate their voting power to others under strictly defined and publicly visible criteria. It consists of a common library, a cli tool, a voting webapp, a delegator webapp, public database api, daemon service for non-technical users and a vault server for cryptographic key management. All services run in a self-deployable and self-managing cluster. All packages are open source and published to npmjs.com registry or to Docker cloud. Wise app: https://wise.vote/, the explanation: https://docs.wise.vote/, and the sources: https://github.com/wise-team.

I have improved on multiple skills at Wise-team, such as brainstorming and collaborating in a team. I have presented our ideas and the product to the public at the Steemfest conference in autumn 2018. Technical skills mastered at Wise include: Typescript+Javascript full stack, Vue.js, Docker, GIT, continuous integration (Travis CI), continuous deployment (Ansible), TDD.

05.2019 - TODAY — (NON PROFIT PROJECT) PERSONALIZED PATIENT ADVICE SYSTEM FOR VOIEVODSHIP REHABILITATION HOSPITAL FOR CHILDREN IN AMERYKA

***Stack**: Firebase (Functions/Firestore/RealtimeDB/Auth/DynamicLinks/Hosting) + Typescript/Node.js/browser + Vue.js + + Android native + Google Play store + Travis*

The idea behind this project was invented by two doctors on the Allergology Ward of the hospital. Patients and doctors on this ward have to cope with two problems: first — allergic test have long evaluation time and the results arrive at the hospital after patient discharge; second — the advice is often complicated and hard to remember by the patient. I was asked to develop a system that allows patient's parents to view medical advices on their mobile devices. The advices are created by the doctors in the hospital and then, a deep link to the app is sent to the patient's parent phone. Whole system uses a serverless approach with database, cloud functions and authentication provided by Firebase. Currently the system consists of a native Android app for parents and an electron based standalone desktop app for medical professionals. iOS app for parents and user management app are due to be done. This is a non-profit and open source (GPLv3) project: https://github.com/Jblew/amerykahospital-personalizedadvice / website: https://aplikacja.ameryka.com.pl/

01.2020-TODAY — (NON-PROFIT GROUP) PERSON CENTRED SOLUTIONS

***Stack**: Healthcare + social sciences research*

At PCS we are small group of healthcare and law related people. We are aimed at helping hospitals and healthcare institutions to understand and implement Person Centred Care. Our work is focused on: research, popularization and development of hardware/software tools that comply with the idea of Person centred care. Why PCC? It is one among the rare techniques that improve quality of care without leading to cost explosion - PCC optimizes using resources that are already available (patient motivation, family time, empathy, compliance-issue wasted resources). You can read more about PCC on our website ://personcentred.care.

IT SKILLS

Highlights: Fullstack (Typescript + Vue + Node.js) + Java SE + Blockchain + cloud

Languages

★★★★★ Typescript + Javascript (TOP 3 Typescript developer in Poland on Codersrank.io). Browser + Node.js
★★★★☆ Java SE 8 + advanced concurrent programming
★★★★☆ Software architecture: UML, SOLID/DDD/component architecture/efficient boundaries
★★★☆☆ Go (IoT)
★★☆☆☆ Python (Django, scripting, data processing, lab hardware).

Frontend

★★★★★ Vue.js + vuex + vue-router
★★★★☆ xstate (state machines)
★★★☆☆ IndexedDB (Dexie.js)
★★★☆☆ React + redux
★★★☆☆ Webpack

★★★★☆ HTML5 + CSS3
★★★☆☆ Design: GIMP + Affinity Designer (vector)
★★★☆☆ Bootstrap
★★★☆☆ Material design (+Vuetify)
★★★☆☆ SASS (SCSS)
★★☆☆☆ jQuery

Tools

★★★★☆ Docker + docker swarm
★★★★☆Travis
★★★★☆ TDD (JUnit, Mocha, Jest, Tslint, Sinon, Istanbul/nyc, Codecov, Code Climate)
★★★★☆ NPM package publishing with (pipeline: travis + semantic-release)
★★★★☆ Git + github + conventional commits
★★★☆☆ Ansible
★★★☆☆ Linux (Debian family)
★★★☆☆ BASH + ZSH
★★☆☆☆ Hashicorp Vault

Databases

★★★★☆ PostgreSQL + query profiling + NoSQL mode
★★★★☆ Firestore / Realtime Firebase
★★★★☆ GraphQL (Hasura + Apollo)
★★☆☆☆ MySQL/MariaDB
★★☆☆☆ Redis

Backend services

★★★★☆ Nginx (proxy, ws, fastcgi, tsl/ssl, templating, dynamic)
★★★☆☆ OAuth (custom flow for Steemconnect with Passport.js and Hashicorps vault)
★★★☆☆ ExpressJS
★★☆☆☆ Apache 2

Cloud/serverless

★★★★☆ Firebase serverless / GCP elements
★★★☆☆ Bare metal server administration
★★☆☆☆ Amazon AWS (S3, EC2, IAM)
★★☆☆☆ Docker Swarm + bare metal server administration

Blockchain

★★★★☆ Hive (former steem) blockchain (Hive/steem dApp architect)

Misc

★★★☆☆ Embedded programming: Platform.io/Arduino. IC families: STM32, ESP32, ATM8, nRF52
★★★☆☆ Cryptography with an understanding of several algorithms and associated threats. Did experimental implementations of these. I am also currently an administrator of two Hashicorp Vault servers at Wise.
★★☆☆☆ Operating measurement equipment: digital oscilloscope and DDS function generator. (Used this mostly for physics experiments at home.)
★★☆☆☆ Electronic circuit design and board prototyping.
★★☆☆☆ Lan networks with complicated mesh setup

LISTED ON & CERTIFICATES

- TOP 3 Typescript in Poland, TOP 5 Vue.js in Poland on Codersrank.io (https://profile.codersrank.io/user/jblew). Based solely on my open source work
- OCUP2 Certified UML professional, level: foundation. Certificate: https://www.omg.org/cgi-bin/searchcert.cgi?keywords=cid683425

LANGUAGES

English C1 (working remotely in the UK), Polish native

INTERESTS AND EXTRACURRICULAR ACTIVITIES

- Programming since I was 9 years old
- Interested in oncology - currently finishing a systematic review on pericytes and angiopoietins.
- Hobbies include piano, surrealistic art and psychological sci-fi literature.
- I enjoy hands-on projects where I first plan out a complex design and then build it by hand. Mostly art installations with electronic / IT components.
- Active member and elected Vice-chairman (2016-2017) of Academic Catholic Student Association Soli Deo.