# GIACOMO TAGLIABUE

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Hi, I am Giacomo, a full stack developer, I like crafting software that matters. I am interested in the web, distributed systems, automation and resiliency at scale.

### TECHNOLOGIES AND SKILLS

I am very good at: Python (Flask, SQLAlchemy), ES6/typescript, REST Services, µservices, Docker, SQL.

I am  $\underline{\text{quite good}}$  at: AWS, Kubernetes, Graphql, Relay, React, C#.

I am good at: Redis, Websocket, CSS3, SASS, Django, NoSQL.

I am a <u>beginner</u> at: Scala, F#, Go.

Some tools and practices I use on a daily basis: bash/zsh, webpack, CI/CD, automated testing, git, github-flow, Visual Studio Code, Sublime Text.

The rest, I hope to learn one day.

## WORK EXPERIENCE

# Head of Cloud - 4Catalyzer - 2015-today

Designing and implementing cloud platforms for multiple startups in the healthcare/medical devices industry, as well as facilitating knowledge sharing and best practices across the startups.

- <u>4Catalyzer Head of Cloud</u>: Some of my responsibilities as head of cloud include facilitating sharing of knowledge and code, ensuring best practices and coding standards, consulting for cloud system technical design, reviewing code, hiring.
- <u>Quantum-SI Software Engineer</u>: As full stack developer I work on different features, most notably: implemented a distributed workflow platform for executing third-party code in a secure and performant manner; led the effort to migrate to Kubernetes, designed and implemented a fault tolerant publish-subscribe/queue-based system for communication across microservices. **Technologies used**: AWS (EC2, SQS, SNS and others), Kubernetes, Flask, SQLAlchemy, Redis, Graphql, React, Webpack.
- <u>Butterfly Network Software Engineer</u>: Working full stack on new features for the cloud platform. Implemented reliable automation. Worked toward achieving HIPAA compliance. **Technologies used**: Django, Docker, Graphql, React, Webpack.

#### Software Engineer - Hyla Soft - 2013-2015

Built web applications to provide solutions for the manufacturing industry, and supervised the software development process and standards company-wide. I leveraged and pushed new web technologies in an enterprise context. Some projects and initiatives I led:

- <u>JSM (2014)</u>: Design and implementation of an order management system for small part manufacturing shop floors. JSM is focused on simplicity, ease of use and configuration, high modularity and extensibility, modern web interface. **Technologies used**: C#, ASP.NET WebApi, MSSQL, Typescript, SASS/Compass, Bootstrap, Grunt, Bower.
- <u>SPOM (2014)</u>: Design and implementation of a system to manage and monitor operations in an oil and lubricant manufacturing company. **Technologies used**: C#, ServiceStack, MSSQL, Typescript, SASS, Angular Material, Gulp, Grunt, Bower, Appveyor CI, Electron.
- <u>Hyla Soft SW Development Initiative</u>: I helped Hyla Soft improve company's software development projects by fostering best practices, standard tools and products, a healthy engineering culture, and modernizing the technological stack. The results are summarized in these slides: <a href="https://goo.gl/cCXYfW">https://goo.gl/cCXYfW</a>.

# Research Assistant - DARPA / University of Illinois at Chicago - 2012-2013

Employed in DARPA's CSFV (Crowd Sourced Formal Verification) Project. CSFV investigates extensions of compilers' optimizations using formal verification. Technologies used: C++, LLVM-CLANG infrastructure, Z3 SAT solver.

### EDUCATION

Master of Science Degree in Engineering of Computing Systems

Politecnico di Milano - Milano, Italy - GPA 28/30

Master of Science Degree in Computer Science

University of Illinois at Chicago - Chicago, Illinois - GPA 3.85

Bachelor of Science Degree in Engineering of Computing Systems

Politecnico di Milano - Milano Italy

Master thesis: An Annotation Framework for the LLVM Compiler Infrastructure

Available at <a href="https://github.com/itajaja/thesis">https://github.com/itajaja/thesis</a> Supervisor: Lenore Zuck

### PERSONAL PROJECTS

 $\underline{\text{h-opc}} \hspace{0.1cm} \underline{\text{https://github.com/hylasoft-usa/h-opc}}$ 

OPC made simpler. For UA and DA.  $\,$ 

markdawn https://github.com/itajaja/markdawn

Markdown for paged documents. This very resume is built with markdawn.

HexaBattle https://github.com/hylasoft-usa/hb

A turn based strategy game to explore the capabilities of tyepscript, react and svg.

cs-boilerplate https://github.com/hylasoft-usa/cs-boilerplate

A boilerplate set of Grunt tasks for .NET applications to enforce coding standards among all company's project.