

# Mauro Lavigna

Software Engineer

[mauro.lavigna@gmail.com](mailto:mauro.lavigna@gmail.com)

<https://www.linkedin.com/in/mauro-lavigna/>

---

## Summary

Seasoned Software Engineer with 10+ years of experience and knowledge on web-based and standalone applications. Professional, flexible, creative, and service-oriented. Offering a unique combination of creativity for problem solving and analytical skill with the ability to assess both vantage points to create robust, cost-effective solutions for internal and external clients.

---

## Experience

### **Lead Software Architect at Teladoc Health**

Oct 2020 – Present

Interacting with stakeholders and product managers to identify business requirements. Document, communicate, and provide complete technical support of various projects for a big team of engineers, throughout their development cycle. Current focus is to migrate parts of a monolithic system into a micro services architecture, and collaborating with other parties towards FedRAMP compliance.

### **Engineering Team Lead at InTouch Health**

Sept 2017 – Sept 2020 (3 years)

Managing a small team of software engineers with responsibilities over several full-stack projects, technologies and designs. Developing an Identity Provider server, an Authorization Provider, and a set of web APIs for a device's Fleet Monitoring System, all hosted with high-availability on AWS.

### **Software Engineer at InTouch Health**

Feb 2014 – Aug 2017 (3 years 7 months)

As a member of a scrum team designing, developing and maintaining a collection of systems consisting of a set of web applications, Windows services, and REST web services to monitor and administer the company's telehealth devices fleet.

### **Software QA Engineer at InTouch Health**

Oct 2011 – Jan 2014 (2 years 4 months)

Performing tests on web-based applications and validating their functionality before they reached the customers. Proposing and working on the first automation project for some of the extensive suite of test cases.

## **IT, Technical Services at InTouch Health**

Dec 2009 – Sep 2011 (1 year 10 months)

As a part of the Technical Support team assisting physicians and solving all kinds of problems over the phone. Additionally, performing server's maintenance tasks, creating automated scripts for recurrent tasks, and training new members of the team on new systems or procedures.

---

### **Projects**

#### **Identity and Access Management**

Aims to unify the company's authentication and authorization data with a set of web APIs and supporting infrastructure that authenticates users and systems using tokens.

- Implemented from scratch using the latest ASP.NET Core using the OpenID Connect Certified IdentityServer4 framework.
- Achieved a high-availability architecture through AWS technologies: Elastic Beanstalk, RDS, Application ELB for multiple running instances and with MultiAZ, Rolling/Canary updates, Blue-Green deployments and a failover region.
- On-boarded several clients from the company including SPAs, WebApps, and protected API resources.
- Added SAML support and integrated with external federation services, such as customers' ADFS identity servers.
- Worked on the continuous integration and continuous deployment pipeline.

#### **Fleet Platform Services**

Websites and APIs companion to the Remote Presence telehealth devices, custom-designed to support an administrator's fleet management and monitoring workflow.

- Implementing new features for the system, including communication with Kafka servers, Auth0, a user provisioning for SIP servers, front-end Razor Pages, scheduled tasks, RESTful APIs and Windows Services.
- Redesigning parts of the domain model, and refactoring code to modern standards of C#.
- Migrating components of the monolithic system into new independent services on the cloud from .NET 4.5 to .NET Core 3.1.
- Migration of all our self-hosted application and database servers to the AWS cloud.
- Migration of the code base from centralized Perforce VCS to GitHub.
- Writing Requirement Specification and Verification Test Plans for the whole system.
- Extreme Programming techniques used on a day-to-day basis.

#### **Independent Projects**

- I am a technology enthusiast and strive to continuously improve my skills reading books, doing courses, going to conferences and making functional prototypes. One example of an SPA using Blazor WebAssembly hosted on GitHub Pages is <https://mlavigna.com/>

---

## Skills & Expertise

### **Programming Languages**

C# – JavaScript – SQL

### **Industry Knowledge**

Agile Methodologies – Microservices & Microfrontends – Distributed Systems – Domain Driven Design – API Design – Software Design Patterns

### **Tools & Technologies**

Amazon Web Services – Git – Docker – Jenkins – Kafka – Elasticsearch – Redis – ReactJS – ASP.NET – MVC – Entity Framework – Serilog – Linux (Arch, Debian)

---

## Education

### **Universidad Nacional del Sur**

Engineer, Computer Systems, 2006 - 2011

62% Completed, relevant courses taken included:

(7526) Computer Architecture - (5744) Computer Organization - (7655) Data Structures - (7642) Database Systems - (2907) Digital Techniques - (5941) Distributed Systems - (7791) Formal Languages and Automata - (7703) Human-Computer Interaction - (5786) Networking and Teleprocessing - (7713) Object Oriented Programming - (5949) Operative Systems - (5793) Problem Solving and Algorithms - (7951) Programming Technologies - (7820) Statistical Models for Computer Science - (7534) Systems Audit - (7901) Systems Security - (7949) Theory of Computation – (5704) Logic for Computer Science

### **Colegio Claret**

BA, Economics and Management of Organizations, 2000 - 2005

---

## Languages

English (Native or bilingual proficiency)

Spanish (Native or bilingual proficiency)

German (Elementary proficiency)

---

## Recommendations

Jonathan Simpson: Co-worker since 2014. Email: simpson27@gmail.com

Joaquin Espinosa: Co-worker since 2012. Email: joacoespinosa@gmail.com

For managers and other recommendations please refer to my LinkedIn profile:

<https://www.linkedin.com/in/mauro-lavigna/>