

Berkeley, CA 94703 USA

Italian citizen  
U.S. Green Card holder



# ALESSIO VALLERO

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## SUMMARY

Talented and dedicated Software Engineer with over 6 years of experience. Adept at overseeing all phases of software development lifecycle, from design/documentation to implementation and deployment to production environments. Exceptional experience working in fast-paced, deadline-oriented environments. Versatile, quick-learner, willing to embrace new challenges.

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## EMPLOYMENT

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### Manager of Software Development Safehub Inc. February 2016 - Now

Development and deployment of SW/HW of a platform able to collect and elaborate earthquakes' data, in order to optimize the collaboration between residents and insurance companies.

- Quickly built the entire prototype of the IOT project: C++ solution for Raspberry PI, low latency back-end, HTML5/PHP website and Android/iOS app (ionic) to view/analyze collected data through the Highcharts visualization package.
- Designed and implemented scalable, secure cloud architecture based on Amazon Web Services including EC2, S3, Route 53, RDS, DynamoDB, Lambda, IAM and VPC.
- Introduced best practices that enhanced product definition, release processes and customization of applications to user needs.
- Excelled in rapid application development and management of technological issues, earning highest satisfaction of the CEO.

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### PhoneGap/ionic/Parse Developer MicStand November 2015 – May 2016

Development and deployment of an Android/iOS (ionic) stand-up comedy discovery app called MicStand.

- Contributed in reorganizing the UI to make the app faster and easier to use.
- Added several core functionalities like Joke game and Top Jokes.
- Introduced Agile as Software Development Lifecycle Model for the company.

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### Visiting Student Researcher UC Berkeley March 2014 – April 2016

Development and deployment of two Android/iOS (Titanium) apps called EDAM (M.S. thesis project) and ParkAdvisor (post-graduation project), with the aim of improving the community resilience. Creation of a C++ HPC agent-based framework to assess the performance of critical infrastructures, performing the simulation of a 3 story building in Oakland, CA.

- Contributed software engineering expertise in the development of products through the software lifecycle, from requirements definition through successful deployment and statistical computing by R and Matlab.
- Acquired knowledge in smartphone apps development and HPC workloads.
- Introduced agent-based methodologies that led to the simulation of a 3 story building in Oakland, CA.

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### World Football Web Developer Deltatre s.r.l. October 2014 – March 2016

Maintenance and development of the ASP.NET, CMS based website fifa.com working for the DevOps, WebOps and UX teams.

- Added more appealing features and redesigned sections to ensure a more attractive and user friendly experience.
- Gained experience on Agile Project Management and scrum methodologies with JIRA.
- Rapid adaptation into complex deadline-oriented environments and deployment cycles.

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### .NET/C++/Java Developer C System Global s.r.l. January 2010 – January 2014

Development of high-scale .NET/Java applications related to video surveillance, cash validation and business management.

- Implementation and development of video codec, UI, DB improvements (SQL Server 2008), extensions, bug fixing, integration of new camera models, help desk and direct contact with customers.
- Performance tuning: decreased by 20% the startup time, by 5% the overall SQL execution times and by 10% the memory usage.
- Acquired deep knowledge in unit testing, code reviews and usage of coding style conventions, design documentation, diagnose and troubleshoot complex distributed problems, multi-thread, concurrency on high-traffic scalable systems.

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## EDUCATION

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### Turin, Italy – Berkeley, CA USA Polytechnic University of Turin, UC Berkeley September 2006 – Now

- PhD in Civil and Environmental Engineering, 2015 – Now. *GPA: None*
- M.S. in Computer Engineering, 2012-2014. *GPA: 3.67/4.00 101/110*
- B.S. in Computer Engineering, 2006-2009. *GPA: 3.78/4.00 104/110*

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## ADDITIONAL EXPERIENCE AND AWARDS

- **Data Manipulation at Scale: Systems and Algorithms (2016):** Coursera online course certification.
- **Development of virtual cities models during emergencies (2015):** Awarded after competing with other students over titles, publications and international experiences.
- **Thesis proposal (2014):** Scholarship for developing the M.S. thesis abroad. Earned with 716 points over the required 450, based upon the G.P.A.

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## PROGRAMMING LANGUAGES AND TECHNOLOGIES

- C, C#, C++, C++/CLI, VB.Net, HTML, JavaScript, PHP, Java, ASP/ASP.Net, XSLT, SilverLight, Titanium, PhoneGap/ionic, Parse, MySQL, MongoDB, R, Asana, AJAX, REST, SOAP, XML, JSON, Git, GitHub, BitBucket, JIRA, cPanel, Amazon AWS (DynamoDB, RDS, EC2, S3, IAM, Route 53, Lambda, VPC)
- Visual Studio (2003, 2008, 2010, 2012, 2013); Microsoft SQL Server (2005, 2008); Eclipse; XCode; Matlab; Titanium Studio, Android Studio



## PACIFIC EARTHQUAKE ENGINEERING RESEARCH CENTER

UC Berkeley • Caltech • OSU • Stanford • UC Davis • UC Irvine • UC Los Angeles • UC San Diego • USC • U Washington

October 28, 2014

To Whom It May Concern,

it is my pleasure to recommend Alessio Vallero. From March through September 2014, Mr. Vallero worked at the Pacific Earthquake Engineering Research Center (PEER, a nine-campus research center headquartered at the University of California, Berkeley) as a Visiting Student Researcher to conduct his M.S. final project. During this time, he was under my supervision and has also been actively engaged with other faculty, students and post-doctoral researchers involved in his area of research.

Mr. Vallero has demonstrated a deep understanding of his field. He was a quick learner and did not hesitate to expand his knowledge.

Throughout all this time, Mr. Vallero made sure to explore the necessary theoretical concepts, but also put great emphasis on apply them properly in the practical context of his project.

With this approach, he was able to analyse his findings much more appropriately, and ultimately delivered a very remarkable piece of research with his mobile app EDAM (Earthquakes Damage Assessments Manager).

Mr. Vallero has done an excellent job, and I do not hesitate to recommend him and wish him the very best for the future.

Sincerely,

Stephen A. Mahin, Ph.D.

Director, Pacific Earthquake Engineering Research Center (PEER)

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