# Andrea "Dre" Cadeddu, Ph.D

### Full-Stack Software Engineer, Architect and Scientist

1555 Sherman Ave Evanston, IL 60201 USA Date of Birth: October 21, 1982

Citizenship: US, Italy

Mobile: +1 787 210 5525 Mobile: +39 379 211 3712 Email: cadedduan@gmail.com Other Languages: (CEFR)

Spanish C1, English C2, French C1, Catalan A2.

#### **Current Position**

Director of Software Development - Deft - Since January 2022 *Software and cloud architectures, development and training.* 

#### Education

Ph.D. Physical Chemistry, Institut de Science et d'Ingénierie Supramoléculaires (ISIS), Université de Strasbourg , 17 December 2012.

M.Sc Material Science, University of Cagliari, 2008.

B.Sc Material Science University of Milan Bicocca, 2006.

### **Certificates**

AWS Certified Solution Architect - Professional

AWS Certified DevOPS Engineer - Professional

#### Skills

AWS, Serverless, JavaScript, Python, Java, Html5, CSS, Node, Angular, React, Vagrant, Puppet, Ansible, Docker, Kubernetes, Adobe AEM/CQ. some Clojure, some Haskell, some Go.

#### Research Fields

Chemistry as a Natural Language, Machine Learning, Chemical Networks, Nanochemistry, Scanning Tunneling Microscopy, Physical Chemistry, Molecular Dynamics;

#### Recent Professional Activities

Software Architect - Server Central Turing Group - Since March 2020 Software architecture and design, development and training. Multiple projects

Principal Software Engineer, Showpad, September 2019 - March 2020. Team lead for Coach (learning platform), UI, training and management, project ideation, planning and architecture, development.

Principal Software Engineer, Roomit (CWT), April 2018 - September 2019. Training, project ideation, planning and architecture, development. Main product: real time personalization of hotel search services

Server Central - Turing Group - Director Software Development, Chicago IL, August 2017 - April 2018 Responsible for Client relationship, team lead, training and management, project ideation, planning and architecture, development. Aws serverless and event-based streaming architectures

Server Central - Turing Group - Software Architect, Chicago IL, April 2016 - August 2017 Responsible for Client relationship, project ideation, development and training. AWS architectures, HIPAA EMR software

Hyatt.com - Full Stack Developer, Hyatt corporate office, Chicago IL, April 2014 - April 2016.

Chematica - Lead Software Engineer and Post Doctoral Fellow , Northwestern University, Non Equilibrium Research Center, Evanston IL, USA. February 2013 - April 2014.

#### Scientific Publications

Atomically Precise Prediction of 2D Self-Assembly of Weakly Bonded Nanostructures: STM Insight into Concentration-Dependent Architectures. Small 2015.

Organic chemistry as a language and the implications of chemical linguistics for structural and retrosynthetic analyses. Angewandte Chemie, Volume 126, Issue 31, pages 8246-8250, July 28, 2014

Concentration Dependent Supramolecular Engineering of H-bonded Nanostructures at Surfaces: Predicting Self-assembly in 2D. Journal of the American Chemical Society 2013. doi:10.1021/ja4002025.

Modulating the self-assembly of rigid clicked dendrimers at the solid-liquid interface, Chemical Communications, 2011, 47, 10578-10580.

Self-templating 2D supramolecular networks: a new avenue to reach control over a bilayer formation, Nanoscale, 2011, 3, 4125-4129.

## **Other Publications**

case study for IoT lockers: servercentral.com/case-study-florence case study for Metra: servercentral.com/case-study-metra/

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