

# Stefan Zhelyazkov

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## EDUCATION

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**University of Pennsylvania**, Philadelphia, USA September 2009 - May 2013

**School of Engineering and Applied Science:** Bachelor of Science in Engineering (cum laude)

**Major:** Computer Science

**First Minor:** Science, Technology & Society

**Second Minor:** Mathematics

## WORK EXPERIENCE

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**Software Engineer, WeWork** June 2018 – November 2019

- Worked on a web application for the global furniture inventory of the company. Used Kotlin, Spring, Hibernate, REST, React, TypeScript. Responsibilities included: managing the backend architecture, working with databases and storage, REST APIs, soft delete, security, tests.
- Created a backend library for DAOs (data access objects) which made working with databases and using transactions easier. The library was shared with other teams and received good feedback, which helped its integration in the common backend library for the department.
- Worked with a summer intern whose project was successfully integrated into production.

**Software Engineer at Honest Buildings (now part of Procore Technologies)** April 2016 – March 2018

- Developed most of the first Reporting & Exporting tool - DB queries, in-screen data formatting, coloring, filtering, saving, and exporting to Excel. Used Java 8, Dropwizard, AngularJS 1.6, JavaScript, jOOQ.
- Actively contributed to a stronger backend architecture. Initiated and contributed to the separation of the services layer from the endpoints.
- Cleaned up legacy code, resolved bugs, and helped increase code coverage.
- Helped introduce a Java linter and a stylechecker.
- Regularly updated some of our backend library dependencies and performed code uplifting accordingly.

**Technology Analyst for the Credit Risk team at Goldman Sachs** July 2013 – March 2016

- Java back-end applications aggregating GB's of data and producing Credit Risk metrics. Worked on the full flow from sourcing, transforming, aggregating, displaying and storing the data. Optimized the legacy codebase. Documented it. Sped up certain processes by up to 14%.
- Adapted several large Java applications (60GB RAM ~ 120GB) to run on a new grid of servers thus helping reduce maintenance costs. This work resulted in annual savings between \$100,000 - \$200,000.
- Actively worked with interns and other junior people. Participated in the recruiting efforts of the company, including the firmwide Hackathon Recruiting Committee for 2015/2016.

## BACHELOR THESIS

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**Reading Music from Images – Senior Design Project ([paper](#))** September 2012 – May 2013

- Worked in a team on an algorithm that makes music out of pictures. The algorithm analyzes the color properties of an image, maps those colors to sounds, and connects the sounds into music. My main focus was on the design of the algorithm using existing research on the topic. One of the main goals achieved was producing a deterministic implementation with no use of randomness.
- The project was featured on the front page of the school newspaper – [the Daily Pennsylvanian on April 15<sup>th</sup> 2013](#).

## IN ADDITION

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- [Completed](#) Coursera course Building Cloud Services with Java and Spring, October 2019
- [Completed](#) Coursera course Kotlin for Java Developers, by JetBrains, December 2018
- [Completed](#) Coursera course Front-End Web Development with React, November 2018
- [Completed](#) Coursera course on Algorithms, part I, by Stanford University, Fall 2014
- [Completed](#) Coursera course on Algorithms, part II, by Stanford University, Spring 2015
- [Completed](#) Coursera course on Functional Programming Principles in Scala, Spring 2014

- Solved [95 problems](#) on Project Euler (Level 3). Top 1.379% of more than 1MM registered users with at least 1 solved problem.

## **PROGRAMMING LANGUAGES**

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Java (10+ years), JavaScript/TypeScript (5+ yrs), Kotlin (2+ yrs), PHP, Scala, Haskell, OCaml and others.  
Platforms and libraries: Spring, React, Dropwizard, Hibernate, jOOQ, JUnit