

# CV - Jan Mas Rovira

## PERSONAL DATA

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BIRTH: 12th of January 1993, Vic, Catalonia.  
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## ACADEMIC HISTORY

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Current SEPTEMBER 2018	MASTER IN PURE AND APPLIED LOGIC <i>University of Barcelona</i>
JULY 2018	MASTER IN INNOVATION AND RESEARCH IN INFORMATICS (SPEC. ADVANCED COMPUTING), 120 ECTS <i>Polytechnic University of Catalonia with an exchange period of 1 year (60 credits) at Chalmers University of Technology, Sweden.</i> Grade: <b>9.1/10</b>
JULY 2015	BACHELOR'S DEGREE IN INFORMATICS ENGINEERING <i>Polytechnic University of Catalonia</i> Grade: <b>8.12/10</b>

## LANGUAGES

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CATALAN Native  
ENGLISH Fluent  
ENGLISH Fluent

## PROJECTS

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- JULY 2018 MASTER'S THESIS: Automatic Inductive Equational Reasoning  
*Report:* <https://gitlab.com/janmasrovira/master-thesis-doc/blob/master/final-report.pdf>  
*Source code:* <https://gitlab.com/janmasrovira/phileas>  
*Grade:* 9.5  
*Description:* This projects presents Phileas, an automatic theorem prover capable of inductively proving equations on Haskell terms. The prover itself is implemented in Haskell. This project was supervised by Albert Rubio Gimeno.
- SEPTEMBER 2017 COLLABORATION WITH THE CAKEML PROJECT.  
<https://cakeml.org/>  
*Description:* CakeML is a formally verified compiler for a substational subset of Standard ML. I collaborated with the CakeML team at Chalmers University under the supervision of Magnus Myreen in the efforts to optimize a compilation stage of the CakeML compiler.
- JULY 2017 CO-AUTHOR OF A RESEARCH PAPER.  
[https://www.researchgate.net/publication/318200476\\_Jutgeorg\\_Characteristics\\_and\\_Experiences](https://www.researchgate.net/publication/318200476_Jutgeorg_Characteristics_and_Experiences)  
*Description:* This paper explains the experiences of using an online judge developed and used in teaching at the Polytechnic University of Catalonia. My contribution was the implementation of a Haskell code analyzer that checks some constraints on the code that the students submit.
- MARCH 2017 AN OCAML BACKEND FOR AGDA.  
<https://gitlab.com/janmasrovira/agda2mlf>  
*Description:* Initial efforts to implement an OCaml backend for the Agda programming language. Development has been continued in the official Agda repository. This project was done in conjunction with Frederik H. Iversen under the supervision of Ulf Norell at Chalmers University of Technology.
- JULY 2015 BACHELOR'S THESIS: Automatic Static Analysis of Haskell Programs.  
*Report:* (In Catalan) <https://upcommons.upc.edu/handle/2117/79657?locale-attribute=ca>  
*Source code:* <https://gitlab.com/janmasrovira/haskal>  
*Grade:* 8.8  
*Description:* This project presents the implementation of an automatic Haskell code analyzer capable of transforming certain functions into a tail-recursive function (under some assumptions). Additionally, it can also find in some cases a strictly recursively-decreasing arithmetical expression that proves termination. This project was supervised by Albert Rubio Gimeno.