Date of the CVA	13/01/2020

Section A. PERSONAL DATA

Name and Surname	Vazou Niki		
NIE	Y6865305-A	Age	32
Researcher's identification number	Researcher ID		
	Scopus Author ID	54584397900	
	ORCID	0000-0003-0732-5476	

A.1. Current professional situation

Institution	FUNDACION IMDEA SOFTWARE			
Dpt. / Centre				
Address				
Phone	(0034) 666821182	Email	niki.vazou@imdea.org	
Professional category	Research Assistant Professor		Start date	2018
UNESCO spec. code				
Keywords				

A.2. Academic education (Degrees, institutions, dates)

Bachelor/Master/PhD	University	Year
Computer Science	University of California, San Diego	2016

A.3. General quality indicators of scientific production

JCR articles, h Index

In my field, conference publications are the primary way of disseminating novel results. My conference publications include, among others:

• 7 papers with conferences CORE rank A * (flagship): 2 ICFP, 3 POPL, 1 PLDI and 1 OOSPLA.

• 2 papers with conferences CORE rank A (excellent): 2 ESOP.

CORE conference rankings are available at core.edu.au. I have published at the flagship conferences in functional programming (ICFP), programming language theory (POPL), and object-oriented programming (OOSPLA).

Key metrics according to Google Scholar

• h-index: 8

• Total number of citations: 469

Section B. SUMMARY OF THE CURRICULUM

I am an Assistant Research Professor at the IMDEA Software Institute in Madrid.

I obtained my PhD in 2016 from University of California, San Diego.

Before joining IMDEA in 2018, I held a postdoc position at the University of Maryland, College Park.

During my PhD, I interned at Awake Security and Microsoft Research Redmond and Cambridge.

My research interests are on functional programming, type systems, and automated verification.

My most influential project is Liquid Haskell, an extension to the Haskell programming language into a useful and usable theorem prover.

During my seven years of research activity I published 13 papers in highly prestigious conferences, including POPL, PLDI, ICFP, ESOP, VMCAI, and Haskell Symposium.

My h-index is 8 and I have 469 citations.

I have given keynotes to functional conferences, including Haskell eXchange and Zurihac, and invited talks at more than 10 universities. Further, I have participated in two IFIP Working Groups (IFIP 2.1 and 2.8), and three Dagstuhl and Shonan invitation only seminars.

I have been awarded the Microsoft Research Graduate Research Fellowship (for years 2014-2016) and won the UCSD CSE Gradual Award at 2015.

In 2018, I received a best paper award at OOPSLA for the paper Gradual Liquid Type Inference.

Scientific Service.

I am a member of the Haskell Symposium steering committee and the Haskell.Org committee.

I have chaired the Student Research Competition of POPL 2019, 2020 and the Haskell Implementor Workshop of ICFP 2019.

I have co-chaired the Programming Languages and Analysis for Security 2019, the Type-Driven Development Workshop and the Programming Languages Mentoring Workshop and ICFP 2018.

Since 2016, I have been a member of 21 committees, including POPL 2019, ICFP 2018, and ESOP 2018.

Teaching and supervising. I have so taught 1 seminar on UPM, 2 courses at University of Maryland and an one week workshop for Clubs of Science in Mexico. I have mentored 2 undergraduate and 3 graduate students.

Section C. MOST RELEVANT MERITS (ordered by typology)

C.1. Publications

1 **Scientific paper**. Martin Handley; Niki Vazou; Graham Hutton. 2020. Liquidate your assets: Reasoning about resource usage in Liquid Haskell Principles of Programming Languages.
2 **Scientific paper**. James Parker; Niki Vazou; Michael Hicks. 2019. Information Flow Security for Multi-Tier Web Applications Principles of Programming Languages. ACM SIGPLAN.
3 **Scientific paper**. Milod Kazerounian; et al. 2019. Type-Level Computations for Ruby Libraries Programming Language Design and Implementation. pp.966-979.
4 **Scientific paper**. Niki Vazou; Éric Tanter; David Van Horn. 2018. Gradual Liquid Type Inference Object-Oriented Programming, Systems, Languages & Application. ACM on Programming Languages. 2-132.
5 **Scientific paper**. Niki Vazou; et al. 2018. Refinement Reflection: Complete Verification with SMT.Principles of Programming Languages. ACM on Programming Languages. 2-53.
6 **Scientific paper**. Niki Vazou; et al. 2018. Refinement Types for Ruby International Conference on Verification, Model Checking, and Abstract Interpretation. Lecture Notes in Computer Science. 10747, pp.269-290.
7 **Scientific paper**. Niki Vazou; et al. 2018. Theorem Proving for All Haskell Symposium. ACM SIGPLAN Notices. 53-7, pp.132-144.
8 **Scientific paper**. Niki Vazou; Leonidas Lampropoulos; Jeff Polakow. 2017. A Tale of Two Provers Haskell Symposium. ACM SIGPLAN Notices - Haskell. 52-10, pp.63-74.
9 **Scientific paper**. Niki Vazou; Daan Leijen. 2016. From Monads to Effects and Back International Symposium on Practical Aspects of Declarative Languages. Lecture Notes in Computer Science. 9585, pp.169-186.
10 **Scientific paper**. Niki Vazou; Alexander Bakst; Ranjit Jhala. 2015. Bounded Refinement Types International Conference on Functional Programming. ACM SIGPLAN Notices - ICFP. 50-9, pp.48-61.
11 **Scientific paper**. Eric Seidel; Niki Vazou; Ranjit Jhala. 2015. Type Targeted Testing European Symposium on Programming. Lecture Notes in Computer Science. 9032, pp.812-836.
12 **Scientific paper**. Niki Vazou; Eric Seidel; Ranjit Jhala. 2014. Liquid Haskell: Refinement Types in the Real World Haskell Symposium. ACM SIGPLAN Notices - Haskell. 49-12, pp.39-51.

13 **Scientific paper**. Niki Vazou; et al. 2014. Refinement Types for Haskell International Conference on Functional Programming. ACM SIGPLAN Notices - ICFP. 49-9, pp.269-282.
14 **Scientific paper**. Niki Vazou; Patric Rondon; Ranjit Jhala. 2013. Abstract Refinement Types European Symposium on Programming. Lecture Notes in Computer Science. 7792, pp.209-228.
15 **Scientific paper**. Michalis Papakyriakou; Nikolaos Papaspyrou. 2011. Memory Safety and Race Freedom in Concurrent Programming with Linear Capabilities Federated Conference on Computer Science and Information Systems. IEEE. pp.388-340.

C.2. Participation in R&D and Innovation projects

Contratos inteligentes y Blockchains Escalables y Seguros (BLOQUES) Comunidad de Madrid. Juan Caballero Bayerri. (FUNDACION IMDEA SOFTWARE). 01/01/2019-31/12/2022. 763.600 €.

C.3. Participation in R&D and Innovation contracts

LiquidHaskell-verified parallel code; NSF Award, CCF Ranjit Jhala. 01/07/2019-01/07/2022. 453.000 €.

C.4. Patents