

# The Essence of Nested Composition (Artifact)

Xuan Bi<sup>1</sup>

The University of Hong Kong, Hong Kong, China  
xbi@cs.hku.hk

Bruno C. d. S. Oliveira<sup>1</sup>

The University of Hong Kong, Hong Kong, China  
bruno@cs.hku.hk

Tom Schrijvers<sup>2</sup>

KU Leuven, Belgium  
tom.schrijvers@cs.kuleuven.be

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## Abstract

The artifact contains the Coq formalization of types supporting nested subtyping and composition, NeColus, a simple calculus with disjoint intersection as described in the companion paper.

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## 1 Scope

The artifact consists of the Coq sources of the mechanised semantics and proofs for NeColus. Every lemma and theorem claimed in the companion paper is backed by this artifact.

## 2 Content

The artifact package includes:

- coq directory: Coq formalization and proofs of NeColus;
- spec directory: Ott specification of NeColus;
- README.pdf : Instructions of how to build the artifact.

## 3 Getting the artifact

The artifact endorsed by the Artifact Evaluation Committee is available free of charge on the Dagstuhl Research Online Publication Server (DROPS). In addition, the artifact is also available at: <https://github.com/bixuanzju/nested-composition>.

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## 5:2 The Essence of Nested Composition (Artifact)

### 4 Tested platforms

The artifact is known to work on any platform running Coq (version 8.7.2 or later).

### 5 License

BSD

### 6 MD5 sum of the artifact

2DDDF320EA677407B10949973A105EB4

### 7 Size of the artifact

485 KB

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