

○ concept

● prior foundational work

● work in this dissertation

Implicit Computational Complexity

“A Flow Calculus of mwp-Bounds
for Complexity Analysis”
Jones & Kristiansen (2009)

“Loop Quasi-Invariant Chunk Detection”
Moyen, Rubiano & Seiller (2017)

✎ “mwp-Analysis Improvement
and Implementation: Realizing
Implicit Computational Complexity”
Aubert, Rubiano, Rusch & Seiller (2022)

🔧 “Distributing and Parallelizing
Non-canonical Loops”
Aubert, Rubiano, Rusch & Seiller (2023)

✎ “pymwp: A Static Analyzer Determining
Polynomial Growth Bounds”
Aubert, Rubiano, Rusch & Seiller (2023)

🛡️ “An Information Flow
Logic for Non-Interference”
Aubert & Rusch (2025?)

✓ “Polynomial Postconditions
via mwp-Bounds”
Rusch (2025?)

✓ “Certifying Complexity Analysis”
Aubert, Rubiano, Rusch & Seiller (2023)
Rusch (2023 –)

Related Topics

- ✎ static program analysis
- 🔧 program optimization
- ✓ verification/formal methods
- 🛡️ security