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# Upgrade Your Python Toolkit with uv, ruff, and ty

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Fri, 20 February 2026 | 12h00-12h30 SAST

Attend online

## ABSTRACT

We will explore the modern Python tooling ecosystem from Astral: uv, ruff, and ty – three Rust-powered tools designed to dramatically accelerate your development workflow. uv is an extremely fast package and project manager that replaces pip, conda, poetry, and virtualenv while also managing Python installations. ruff is an all-in-one linter and formatter that consolidates Black, Flake8, isort, and more into a single tool running 10-100x faster than traditional alternatives. ty is a cutting-edge type checker with advanced features like first-class intersection types and sophisticated type narrowing, currently in beta but showing tremendous promise. Through live demonstrations, I'll guide you through installing and using each tool, showing how they integrate seamlessly to create a lightning-fast development experience.

## BIOGRAPHY

Dean is a postdoctoral researcher at Stellenbosch University (SU) in the Quantum Research Group, under the supervision of Prof Francesco Petruccione. His research is on merging quantum and neuromorphic computing principles and paradigms for novel algorithms and architectures. His research has historically evolved through astrophysics, theoretical physics, and open quantum systems.

Dean received his Bachelor of Science and Honours degrees from the University of the Witwatersrand, his Master's from the University of KwaZulu-Natal, and his PhD from SU.



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