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When I first encountered Urbit, it was like Mr. Electrico touching twelve-year-old Ray Bradbury with a charged sword and commanding him to “live forever!” The vision of unfolding but comprehensible complexity was to me a siren song that has led me into rewarding professional relationships and deep friendships. This shape rotator programming has become a lifelong passion and fertile ground of exploration.

This issue of the *Urbit Systems Technical Journal* unveils technical descriptions of significant milestones in Urbit’s ongoing development. `~rovnys-ricfer`, `~master-morzod`, `~watter-parter`, `~dinleb-rambep`, `~norsyr-torryn`, and `~hastuc-dibtux` detail the design and implementation of Urbit’s named data networking scheme, Directed Messaging, a core component of the 2023 “Neo-Urbit” vision. `~dozreg-toplud` expounds the long-anticipated “subject knowledge analysis” paradigm for Hoon static analysis, proposed several years ago by `~ritpub-sipsyl` and long a target for more efficient Hoon compilation to the Nock combinator calculus. `~hanfel-dovned` presents portions of the Groundwire proposal for a revision of Urbit’s peer-to-peer schema beyond Azimuth, a topic of ongoing technical interest in the Urbit developer community. `~ticlys-monlun` and `~lagrev-nocfep` explain how the Nock serialization mechanism for nouns works in detail. And `~nomryg-nilref` reveals in great detail his monumental labor of love that is Obelisk, a return to E. F. Codd’s relational algebra and SQL. Each article represents years of design and engineering work, and we are proud to present them to the Urbit community.

As of 2025, *USTJ* has become a sponsored product of the Groundwire Foundation, a new nonprofit entity dedicated to Urbit’s core development and improving support for Bitcoin integrations into the Urbit ecosystem.

Computer science happens in the trenches. ☒