

“Error Resilience “*Re-Del*” Agent in Multichannel Telecommunications Network Systems”

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Before joining the United States Airforce 16th Intelligence Squadron assigned to NSA Fort Meade. Nate was and still works for Dell Inc. at the Executive Office of the President as a Senior DBA Advisor on budget system. Nate is also the current resident PostgreSQL database expert for Social Security Administration Disability Claim Processing System implementation project nationwide. Nate also recently lead the Department of Education (www.studentaid.ed.gov) ISE Infrastructure Upgrade as the lead enterprise engineer architecting and building custom MySQL database (v5.5 to v5.7) using custom filesystem which enforces DoD data hardening standards which provided several key performance and security improvement. As an Enterprise database expert , Nate leads the development and building of database (Oracle,DB2, PostgreSQL and MySQL) from source code and data warehouse systems on unix (AIX, FreeBSD, HX-UNIX, RedHat Enterprise Linux) platforms.

Abstract:

Multichannel networks are complex and errors generated from their automated complex event processing that provide network services subscription to other entities, undermines attempts to provide reliable, predictable, end-to-end high performance fault tolerance networks. I developed an error resilience “*Re-Del*” agent in a multichannel network system that utilize knowledge discovery engine concept (KDE). The agent provides error resilience by reliability increasing service provisioning and activation success rate. This agent uses reinforcement learning and adaptive control algorithm. An alternative implementation of “*Re-Del*” agent uses confidence driven and adaptive protection algorithm .This approach provided an opportunity to compare the performance of the agent.

Contact Dr. Soo-Yeon Ji (sji@bowiestate.edu) if you have any question.