Kyle Marek-Spartz

Engineering software, reliability, and collaboration.

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I find again and again that improving how we work yields compounding returns. I'm a big believer in 1-1s, TDD, pairing, continuous delivery, and retrospectives. I have found great value working with cross-functional and distributed teams.

Experience

Granicus (formerly known as GovDelivery), 2014-Present

Site Reliability Engineer, 2017-Present

Founding member of SRE team. Helped define the team mission. Guided team toward engineering and agile best practices using informal scrum master approach.

Introduced changes without being dogmatic. Focused on incremental and experimental changes. Coached team toward identifying full queues and bottlenecks in their process.

Participated in on call rotation. Improved alert and incident management automation. Strived for improvement after every unplanned event, which improved our service levels. Increased adoption of monitoring tools by streamlining change process.

Mentored team members to help balance skill gaps. Established cross-training culture. Connected the team with other parts of the organization.

Software Engineer, 2014-2017

Led cross-department team to promote collaboration, diversity, distributed/remote team skills, and mentorship throughout the company.

Reinforced process improvements by formalizing a definition of done, especially around deployment, documentation, monitoring, load testing, measurement, and data practices. Increased release reliability by investing in test reliability and release frequency.

Enabled customers to segment and engage citizens based on activity and outcomes using a streaming data architecture. Increased subscriber import reliability and performance to reach over 100 million subscribers. Prototyped account monitoring to classify client health.

Celador, 2013-Present

Co-Founder

Consulted organizations on various topics:

- data science: time series analysis, recommender systems
- development and maintenance of web and mobile applications
- IT management, business practices, organizational culture change

Coached junior engineers while supporting contracts.

University of Minnesota College of Pharmacy: Speech Informatics Lab, 2012-2014

Research Assistant

Speech and cognition research developing speech processing to screen for neurocognitive diseases, e.g. Alzheimer's and Dementia. Lead developer, Python (Flask+SQLAlchemy) REST server and web application for psychological examination, data collection, speech transcription, and analysis. Integrated server with Twilio, iOS, and Windows clients.

University of Minnesota Computer Science and Engineering, 2012-2013

Research Assistant, GroupLens: experimental research on propagation of information between language versions of Wikipedia, 2012-2013

Developed software to collect articles from multiple Wikipedia language versions. Tracked information flow between languages with intent to seed a recommender for multilingual Wikipedia editors.

Teaching Assistant, CSci 1001, Overview of Computer Science, Spring 2012

Mentored students on history of computer science, software quality, security, and mathematics. Coached students toward pair programming to learn Python.

University of Minnesota UROP, 2011-2012

Developed software to collect and derive social networks from email discussion groups. Analyzed propagation of language change through social networks, diffusion of lexical innovations in emergent social networks via social brokerage / weak ties.

University of Minnesota MobileApp Challenge, 2011-2012

InContext, a language learning application focused on vocabulary development and retention. Vocabulary list generation, adaptive testing, reading resource suggestion targeting learner. Led Python (web.py) REST server development, assisted iOS application development.

University of Minnesota Aerospace Engineering and Mechanics, 2010-2011

NASA Minnesota Space Grant, 2010-2011

- *Team Lead*, RockSat-C Suborbital Rocket Payload, 2011
- *Research Assistant*, High Altitude Ballooning Team, 2010-2011

Teaching Assistant, AEM 1901, Weather Balloon Seminar, Fall 2010

Developed software and hardware for atmospheric, physics, and biological experiments. Led integration of components into suborbital rocket payload, including planning, documentation, coordination, launch preparation, data analysis, and reporting. Mentored students on engineering practices.

Publications, Presentations, and Posters

System for Automated Speech and Language Analysis (SALSA) (demonstration paper [pdf], poster [pdf]). **Kyle Marek-Spartz**, Benjamin Knoll, Robert Bill, Thomas Christie, Serguei Pakhomov. Interspeech, September 2014.

Computerized Language and Speech Analysis to Measure Effects of Anti-Epileptic Drugs on Cognition (poster [pdf]). Serguei Pakhomov, **Kyle Marek-Spartz**, Robert Bill, Benjamin Knoll, Thomas Christie, Angela Birnbaum, Ilo Leppik, Susan Marino. 3rd International Congress on Epilepsy, Brain and Mind, April 2014.

Construction of the Gmane corpus for examining the diffusion of lexical innovations (workshop paper, [pdf]). **Kyle Marek-Spartz**, Paula Chesley, Hannah Sande. Words and Networks: Language Use in Socio-Technical Networks (WON 2012) Workshop at 2012 ACM Web Science Conference, June 2012.

Education

MBA, *(Enrolled)*, Hamline University, estimated graduation: Summer 2019

Linguistics B.A., with minor in Computer Science, University of Minnesota

Organizations, Service, and Honors

Leadership Saint Paul, Saint Paul Chamber of Commerce Foundation, 2016

- Met with leaders throughout the east metro from industry, government, and charitable organizations. Toured facilities to learn how the city ticks. Worked with a focus group to support a charitable organization in an advisory capacity.

Co-Organizer, HaskellMN (user group), 2014-Present

Founder, Planning Committee, Adviser, Minnesota Undergraduate Linguistics Symposium, 2012-2014

Phi Beta Kappa (ΦBK), 2013

Secretary, University of Minnesota: Society Of Undergraduate Linguists, 2011-2013

National Merit Scholar, 2009-2013

Amateur Radio: KDØGTK, general class license, ARRL member

Skills

- Python (Flask, SQLAlchemy, Alembic, NLTK, matplotlib, boto, MyPy)
- Ruby (Rails, Sinatra, Resque, Sidekiq, JRuby)
- JavaScript
- Haskell (Hakyll, hledger, pandoc)
- R (RStudio, tidyverse)
- SQL (Oracle/MySQL/Postgres)
- Kafka, ELK, Redis
- Docker
- Git (GitHub, GitLab)
- Travis CI
- Ansible, Puppet
- Heroku, DigitalOcean
- Twilio, AWS S3
- Pingdom, PagerDuty, New Relic
- Data analysis: Time series, speech processing, recommender systems