JORDAN M. WITTE

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Full-stack Engineer

TECHNICAL SKILLS

- Software Engineering, 6 years (Java 2 years, React/Python 2 years, React/Node 2 years)
- Python, 7 years (including machine learning research tools)
- Web API with Flask; JVM + SOAP; GraphQL + Apollo
- Frontend engineering with JS/Typescript, React/Redux
- Relational databases with SQL 4 years, TypeORM
- Test-driven development with Jest, PyTest, JUnit
- Collaborative development with source control and review, Git
- Full-stack architecture and deployment with Nginx, Docker
- CI/CD with GitHub Actions, TravisCI
- Fluency with scientific research papers in AI and machine learning
- Project management: product design, documentation, user research, contributor onboarding

EDUCATION

MS, Computer Science, 2019
PORTLAND STATE UNIVERSITY
Research:
- Developed scene recognition methods combining CNN architectures and structured reasoning
- Applied statistical models for semantic image interpretation

Teaching Assistantships in Theory of Computation, Machine Learning, Operating Systems, and others

BA, Mathematics and Philosophy, 2011
UNIVERSITY OF ROCHESTER

WORK EXPERIENCE

Oct 2021 - Feb 2023 Ameelio (remote)
Software Engineer
- Built video and text communication software to serve incarcerated people and families
- Full stack: Typescript/React/Node, GraphQL, Postgres, Docker
- Collaboration with UX designers for hifi implementations
- Intern mentorship

Mar 2019 - Jul 2021 Code for PDX at Portland, OR
Full-stack Engineer, Project Manager (volunteer)
- Built software for criminal record expungement, including live search, page scraping, and legal analysis
- Full stack: Python/Flask, Typescript/React/Redux, Postgres, Docker
- Product development with users and domain research (criminal law, public health)
- Collaborative development, organizing volunteers, new contributor on-boarding

Jun - Sep 2017 Digimarc at Beaverton, OR
Machine Learning Developer (intern)
- Developed high-speed visual pattern recognition algorithms
- Neural network model tuning and evaluation
- Model implementations in Keras/TensorFlow

Jun - Sep 2016   Los Alamos National Laboratory at Los Alamos, NM
                    Machine Learning Developer (intern)
- Built depth-aware sparse neural networks for visual object detection and depth prediction
- Experiments in PetaVision: an open-source, large-scale sparse neural net framework
- Contributed experimental results and open source analysis tools in Python

Jun - Sep 2015   Perceptronis Solutions at Portland, OR
                    Data Science Developer (intern)
- Developed data mining tools for political and marketing campaign analysis
- Social network modeling using graph structures and algorithms in Java
- Live data collection using 3rd-party Java APIs

Oct 2012 - Mar 2014 Citigroup Inc. at Buffalo, NY
                    Java Developer
- Primary developer for multiple projects, including project spec and design
- Multi-process job scheduling using thread libraries and inter-process communication
- Integration with UX teams and existing business workflows
- In-team QA with Unit Testing (JUnit)
- Oracle SQL with Java libraries

RESEARCH PUBLICATIONS

- Quinn, M. H., Conser, E., Witte, J. M., and Mitchell, M. (2018). Semantic image retrieval via active grounding of visual situations. In Proceedings of the 12th International Conference on Semantic Computing. IEEE.
- Rhodes, A. D., Witte, J., Mitchell, M., and Jedynak, B. (2017). Bayesian optimization for refining object proposals. In Proceedings of the 7th International Conference on Image Processing Theory, Tools, and Applications (IPTA 2017). IEEE.