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)
- REST API with Flask, Java; GraphQL with Typescript
- Frontend engineering with JS/Typescript, React/Redux
- Relational databases with SQL 4 years, TypeORM
- Test-driven development with Jest, PyTest, JUnit
- Full-stack architecture and deployment with Docker, Google Cloud Platform
- CI/CD with GitHub Actions
- ETL pipelines using Google Dataflow
- Collaborative development with source control and review, Git
- Machine learning algorithms and dataset modeling
- Project management: product design, documentation, user research, contributor support

EDUCATION

MS, Computer Science, 2019	**BA, Mathematics and Philosophy,** 2011
PORTLAND STATE UNIVERSITY	UNIVERSITY OF ROCHESTER

Research in machine learning; developed scene recognition methods combining CNN architectures and structured reasoning

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

WORK EXPERIENCE

Jul 2023 - Jan 2024 Rasa Legal (remote)
Software Engineer
- Building legal analysis software for criminal record expungement
- Full stack: Python/Flask, Typescript/React, Postgres, Google Cloud Run
- ETL pipeline using Google Dataflow for large-scale data processing
- Machine learning algorithms to interpret public court data for eligibility analysis

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

Mar 2019 - Jul 2021 Code for PDX at Portland, OR
Full-stack Engineer, Project Manager (volunteer, full-time)
- 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   Perceptronics 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., 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.