

# Derek McEwen

dleemcewen@gmail.com (405) 517-6460

<https://www.derekmcewen.com/>

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Senior Software Engineer with 8+ years building scalable systems across Typescript, React, Node.js, PHP, and Python. Proven track record designing high-volume workflows, integrations, and data pipelines used by 500K+ users. Open to relocation and remote opportunities.

## PROFESSIONAL EXPERIENCE

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### Paycom

#### Senior Software Engineer

June 2017 – March 2025  
Oklahoma City, OK & Remote

- Led architecture and development from 0 to 1 on COVID-19 vaccination tracking application for our clients to maintain compliance with state and federal laws.
- Designed and converted expensive single thread batch actions to parallelized jobs with optimized database interactions while maintaining idempotency and reliability.
- Integrated OCR into our file uploaders to read receipt details into forms without manual user input, reducing time to submit by up to 75%.
- Scaled systems from hundreds to millions of records, processing 35M+ expenses submitted by 500K+ employees at over 9K companies.
- Integrated third-party corporate card and bank transaction feeds, enabling automatic expense matching.
- Teamed up to integrate a mileage tracking application with expense management so users could quickly convert a tracked trip into an expense.
- Implemented flexible approval workflows supporting complex organizational hierarchies and enterprise level analytics, increasing expense adoption and usage by our clients by 21%.
- Built and maintained Node.js services consuming RabbitMQ queues, enabling asynchronous ingestion of emailed receipt images (100K+ receipts processed).
- Took a technical leadership role by:
  - Reviewing and merging production code
  - Providing architectural feedback
  - Mentoring junior engineers and raising team engineering standards
- Maintained high-volume production services and resolved customer-impacting incidents in collaboration with live operations teams.

## PROJECTS

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- ATS scoring platform (FastAPI, NLP, Next.js)
- Monte Carlo simulation toolkit (Python)
- OSS contributions (Go, AWS SAM)

## EDUCATION

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University of Central Oklahoma  
B.S. in Computer Science

Edmond, OK

- Service and Academic Performance Award.
- Tutored for 4 semesters, assisted students learning for all coursework.

## SKILLS

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- **Tech:** React, Next.js, Node.js, PHP, RabbitMQ, MySQL/Postgres, AWS, OCR pipelines, REST APIs
- **Languages:** TypeScript/JavaScript, PHP, Python, Go
- **Concepts:** distributed systems, async processing, workflow engines, idempotent jobs, scalability