Alex M. Borchers

Software Developer | Full-Stack Engineer
Omaha, NE | alexmborchers@gmail.com | 712-899-0027
Portfolio: https://alex-borchers.netlify.app/

Education

Master of Science: Computer Science | University of Nebraska – Omaha
May 2023
- Summa Cum Laude, GPA: 4.0
- Specialized Emphasis in Software Engineering

Bachelor of Arts: Mathematics | Bachelor of Science: Business Administration | Morningside University
May 2020
- Summa Cum Laude, GPA: 3.90
- Minor in Computer Science
- Emphasis in Finance

Technical Skills

Core Technologies:
- Frontend: React, JavaScript, HTML5, CSS, Bootstrap
- Backend: Node (Express), Supabase, Python, PHP
- Databases: SQL Server, MySQL, PostgreSQL
- AI: Cursor, Vercel, V0, ChatGPT, Claude
- Other experience in: PHP, Java, C++, VBA, Overleaf, Flask

Tools & Platforms:
- Agile Methodologies
- API Integration (Google Suite, Claude, ChatGPT, Avalara, MondayDev, USPS, Viewpoint)
- Version Control (GitHub)
- Microsoft Excel & Access

Professional Experience

Senior Software Developer | Pierson Wireless, Omaha, NE
June 2023-Present
- Lead developer responsible for architecture planning, new feature development, testing, integration, and maintenance of our project estimating, workflow management & logistics software.
- Modernized legacy PHP codebase by migrating core business systems to React.js and Node.js, enabling modular component reuse and significantly improving development velocity.
- Designed and implemented a full MySQL → SQL Server migration, including schema redesign, indexing strategy, performance tuning, and strict data-integrity enforcement with FK and UQ.
- Built an internal agentic AI pipeline to automatically parse inbound PDFs—including sales orders, material orders, and carrier forms—using a multi-stage architecture (classification, structured extraction, validation, and auto-posting). This reduced manual processing time and improved data accuracy across operations.
- Developed Python-based OCR/LLM parsing services integrated with Node APIs to automate repetitive logistics and estimating workflows (e.g., shipment intake, quoting metadata extraction).
- Collaborate in an agile sprint environment, translating stakeholder requirements into actionable development tasks and coaching a team of developers through complex technical decisions.

Business Analyst | Pierson Wireless, Omaha, NE
June 2020-June 2023

- Converted excel financial summary tool to an online platform currently used widely by the company.
- Developed data-driven automation tools to increase departmental efficiency
- Analyzed quote data to calculate win rates across multiple business factors
- Maintained critical workflow management software

Research Experience

Thesis Equivalent Master Project | Dr. Harvey Siy, University of Nebraska - Omaha
August 2022-May 2023

- Conducted research to explore metamorphic, mutation, and differential testing for enhancing machine learning (ML) model robustness, specifically using Support Vector Machines (SVM) for image classification.
- Developed a no-code application for users to interactively train, test, and mutate ML models. It includes options to select metamorphic transformations, tune hyperparameters, and analyze post-training impacts using a ChatGPT API for hyperparameter mutation.
- Tests were conducted using image bitmaps, validated metamorphic relations, and GridSearchCV for hyperparameter optimization.
- Future research ideas are provided to test other ML algorithms (e.g., CNNs) and develop methods for analyzing complex hyperparameter sets, with a focus on scaling applications and improving test data coverage.

Research Assistant | Dr. Chris Spicer, Morningside University
January 2017-May 2018

- Recruited by a faculty member to assist with research, based upon strong academic performance, and leadership characteristics. Provided research on 2 topics.
- Performed research on continued fractions focused on finding trends in data to categorize sets of numbers using algorithms.
- Performed research on graph theory using the game “cops and robbers”. Analyzed research from previous students, developed & provided theorems for new sets of graphs.
- Presented to peers and faculty at the Palmer Research Symposium, Spring 2018.

Highlights & Achievements

- 5-year Collegiate Athlete with Academic All-Conference and All-American Honorable Mention Honors
- Summa Cum Laude in both Undergraduate and Graduate Studies
- Diverse Internship Experience: Avalon Capital Group, Northwestern Mutual, State Farm

Leadership & Community Involvement

- 3-Year Basketball Team Captain at Morningside
- Volunteer Work: Dream Center Mission Trip, Night to Shine, Community Service Projects
- Basketball Skills Trainer for Youth Athletes