

Arshpreet Singh Sandhu

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EDUCATION

Purdue University

Bachelor of Science in Computer Science, Minor in Mathematics,

Fort Wayne, IN

Aug 2023 – May 2027

- **GPA: 3.9/4.0**, Dean's List (All Semesters), Honors Pin Recipient, Purdue Top 50 Award Recipient

EXPERIENCE

Software Engineer Intern – Platform & Infrastructure

May 2026 – Aug 2026

Medical Informatics Engineering

Fort Wayne, IN

- Built Docker node support for a Node.js infrastructure-management platform, implementing host and API request validation and Docker Swarm node discovery to extend infrastructure orchestration beyond existing node types.
- Extended container APIs and OpenAPI schemas for Docker workflows, adding validation and edge-case handling across infrastructure requests to improve API robustness and consistency.
- Diagnosed and resolved infrastructure integration failures across Docker, Linux, Proxmox, SSH, networking, and bare-metal environments, tracing issues across application, host, and network layers.
- Configured an air-gapped Proxmox/Linux environment for Kubernetes integration testing and authored 20+ deployment, networking, and debugging procedures to support infrastructure setup and troubleshooting.

Software Engineer Intern – Ozwell AI

May 2025 – Aug 2025

Medical Informatics Engineering

Fort Wayne, IN

- Built RAG-based healthcare workflows using OpenAI API, embeddings, vector search, and prompt engineering to generate clinical questionnaires, reducing questionnaire creation time by 30%.
- Containerized full-stack AI services with Docker, React, TypeScript, Node.js, and REST APIs, integrating 100+ LLM-generated outputs into validated clinical form components and end-to-end workflows.
- Improved LLM reliability through parsing, validation, and prompt evaluation across 50+ clinical test cases.

Software Engineer Intern – FormBuilder & FHIR Workflows

May 2024 – Aug 2024

Medical Informatics Engineering

Fort Wayne, IN

- Engineered FHIR components in TypeScript and Node.js, supporting questionnaire workflows used by 5K+ users.
- Designed extensible TypeScript plugin architecture for custom controls, accelerating feature development by 60%.
- Localized jQuery FormBuilder into Hindi and Punjabi, expanding multilingual accessibility for global users.

PROJECTS

FenRIS - Fentanyl Risk Intelligence System | Palantir AIP, Ontology, Pipeline Builder

Jun 2025 – Jul 2025

- Designed a full-stack risk intelligence platform using Palantir AIP to forecast and visualize U.S. overdose trends.
- Implemented multi-step data pipelines and modeled 10K+ real-world events via Ontology Manager and Contour.

AI Symptom Checker | React, Flask, Python, Scikit-learn, Postman, Git

Feb 2025 – May 2025

- Applied logistic regression and decision trees to classify 15+ common illnesses from symptoms with 92% accuracy.
- Built Flask-based data pipeline to serve real-time ML predictions, improving system throughput by 30%.

LEADERSHIP AND CAMPUS INVOLVEMENT

Vice President

Sep 2024 – May 2025

Google Developer Groups - On Campus (GDG)

Fort Wayne, IN

- Organized 5+ technical workshops on Android, Google Cloud, and ML APIs, increasing participation by 30%.
- Scaled club to 500+ developers via high-impact tech events, industry panels, and outreach campaigns.

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, C++, Java, Go, SQL

Web/Backend: React, Next.js, Node.js, Express.js, Flask, REST APIs, OpenAPI

Databases: PostgreSQL, MongoDB

AI/ML: RAG, LLMs, OpenAI API, Embeddings, Vector Search, Scikit-learn, Pandas, NumPy

Infrastructure: Docker, Docker Compose, Docker Swarm, Kubernetes, Linux, Bash, SSH, Proxmox

Tools/Platforms: Git, Postman, Palantir AIP, Firebase, Vercel