

Armaan Sandhu

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Education

Worcester Polytechnic Institute <i>Worcester, MA</i>	2025 - Present
Computer Science GPA: 4.0 Dean's List (Fall 2025, Spring 2026) Expected May 2029	
Carmel Junior College <i>Jamshedpur, India</i>	2010 - 2025
High School Diploma 97% (Unweighted) Valedictorian, Class of 2025	

Technical Skills

Languages: Python, C, C++, Rust, Zig, Java, x86-64 Assembly, JavaScript

Tools: Git, GDB, Linux, Bash, Valgrind

Concepts: Systems Programming, Concurrent/Async Programming, Binary Analysis, Query Planning, AI Infrastructure, Open Source Development

Open Source Contributions

mcp-persist <i>Author & Maintainer</i>	May 2026 - Present
<ul style="list-style-type: none">Designed and published a production-grade PyPI package providing Redis, SQLite, and PostgreSQL EventStore backends for the MCP Python SDK's SSE stream resumability interface. 60+ async tests with CI coverage across Python 3.10-3.13.	
modelcontextprotocol/python-sdk	May 2026 - Present
<ul style="list-style-type: none">Resolved silent async exception swallowing in client callbacks by propagating marked exceptions to the caller's task; added INTERNAL_ERROR response handling and regression test. (PR #2674)Identified and resolved a TOCTOU port race condition in the CI test suite causing non-deterministic failures across the Python 3.10-3.14 matrix under parallel execution. Migrated 5 test files, introduced a reusable server fixture, net -88 lines. (PR #2705)Removed unreachable isinstance(result, dict) dead code branch in MCPServer, corrected call_tool return type annotation, introduced ToolResult type alias, and added a structured-output regression test. (PR #2700)	
lance-format/lance & lancedb/lancedb (Rust)	May 2026 - Present
<ul style="list-style-type: none">Implemented rename_table for DirectoryNamespace in the lance core library. (PR #6975, merged)Added native DataFusion expression support to the merge insert query planner, eliminating SQL string parse/serialize round-trip overhead for programmatic callers across both the core library and the lancedb SDK, with correct remote/local dispatch handling. (PRs #6934 merged, #3444)	
lightpanda-io/browser (Zig)	May 2026
<ul style="list-style-type: none">Implemented the W3C File API from specification in a production headless browser engine: constructor, name and lastModified properties, MIME type validation, and HTML integration tests. (PR #2537, merged)	
python/cpython	May 2026
<ul style="list-style-type: none">Fixed three configure.ac build system defects for the Cygwin port: casing inconsistency, wrong static library extension, and hardcoded compiler references replaced with \$(CC) and \$(CXX). (PR #150328, merged)	

Experience

Peer Learning Assistant <i>Computer Science Department, WPI</i>	August 2026 - Present
<ul style="list-style-type: none">Supported undergraduate students in CS coursework through one-on-one debugging sessions, code review, and targeted explanations of systems-level concepts. Guided peers toward independent problem-solving rather than direct solutions.	
Community Advisor <i>Office of Academic Advising, WPI</i>	August 2026 - Present
<ul style="list-style-type: none">Managed a residential student community and served as a frontline resource for academic and personal challenges. Helped students navigate course planning, campus resources, and the transition to college life.	
Karate Instructor / Senior Student <i>Shotokan Academy India</i>	2014 - 2025
<ul style="list-style-type: none">Ni Dan (2nd Degree Black Belt) in an IOC-recognized federation. 2x gold medalist at Nationals; silver and bronze medalist at Internationals. Over a decade of structured instruction across age groups and skill levels.	

Awards & Recognition

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- Valedictorian** | Carmel Junior College (Class of 2025)
 - Most Outstanding Student** | Awarded for excellence in academics, leadership, and extracurriculars.
 - Interschool Java Coding Competition** | 2nd Place (2023, 2024)
 - Ni Dan Black Belt** | Shotokan Karate India (IOC-recognized federation)