Peter Johnstone

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Education

B.E., Computer Science & Engineering, Bucknell University, PA Aug 2022 – May 2026 (Expected)

Honors: Dean's List

Study Abroad: Nanzan University (Spring 2025)

Experience

Lead ICPC Rep & Coding Seminar Organizer at Bucknell University, PA

Sep 2025 - Present

- Faculty-appointed lead for Bucknell's ICPC team
- Run weekly competitive coding seminars emphasizing DS&A + clean code.

Co-Founder & CTO at Eigofy, Inc., PA

Aug - Dec 2024

- Manifest V3 Chrome extension for instant EN \rightarrow JA lookups with spaced-repetition vocab.
- Frontend in JavaScript/HTML/CSS; Webpack bundling and CI/CD for automated builds/deployment.
- Backend on GCP/Firebase (Auth, Firestore), Stripe, and AI APIs; REST and event analytics.
- Acquired 100+ early adopters in the first month; secured grant funding and presented at TechCrunch Disrupt SF. [Landing Page] [Extension]

Software Engineer Intern at Visual Alpha, Tokyo

Jun - Aug 2024

- Built a full-stack internal data-update tool (Python/Flet, SQL, company REST); automated recurring updates to cut manual work.
- Contributed 45 PRs with reviews/docs; shipped to sprint deadlines.

Software Tester Intern at Habitto, Tokyo

Jun - Aug 2023

• Worked cross-functionally with PM, design, and Android engineers to improve reliability across releases by building and maintaining automated login/signup tests (Appium, Java).

Selected Projects

 $Magnus\ Carblunder\ (Rust\ Chess\ Engine)\ --\ Open\mbox{-}source$

Jul - Sep 2025

- Highly optimized Rust chess engine using bitboards, alpha-beta + iterative deepening, transposition table (Zobrist), move ordering, quiescence.
- Profiled with Flamegraph and perft-validated; achieved 2800 Elo vs chess.com bots (levels 1–8) through calibrated self-play testing. [GitHub]

OCR Neural Network in Pure Python — Open-source

May - Jul 2025

• Built character recognizer from scratch (no NumPy): matrix ops, ReLU/softmax, SGD; end-to-end eval + interactive quiz. [GitHub]

Technical Skills

Programming Languages: JavaScript, Python, SQL, Rust, C++, C#, Java, Dart, HTML/CSS Platforms/Tools: REST APIs; Firebase (Auth, Firestore); Google Cloud (Cloud Run/Functions); Stripe; Git/GitHub; Jira; Chrome Extensions API; Flet, Webpack, Vue (portfolio)

Languages: English (Native); Japanese (Fluent, JLPT N1); German (Fluent, Heritage Speaker)