ARNAB HAZARI

Hillsboro, OR | 734-780-6905 | arnabshashi@gmail.com
arnabhazari.dev | US Green Card Holder (EB-1B Outstanding Researcher)

PROFESSIONAL SUMMARY

Senior Staff Engineer at Intel with 8+ years across foundry process development and product engineering. Currently leading end-to-end testchip data solutions for Intel's next-generation products on multiple process nodes including 14A, 18A, and Intel 7. Earlier work on the foundry side spanned yield and process development on Intel 10 and Intel 18A, including process engineering on Intel's first PowerVia testchips. PhD in Silicon Photonics, MBA, ~1,000 research citations, EB-1B recipient. Deep expertise in JMP/JSL, Python, R, and Visual Basic for large-scale statistical analysis.

TECHNICAL SKILLS

Languages: JMP/JSL, Python, R, Visual Basic, SQL

Analytics & Tools: JMP, Power BI (DAX), Excel/VBA, statistical modeling, DOE, SPC, root-cause analysis

Domain: Data pipeline design, Data analysis and visualization, Semiconductor process development, yield & electrical test analysis, photonics device design & fabrication

Leadership: Cross-functional team leadership, technical mentorship, data-driven decision making

WORK EXPERIENCE

Intel Products Group (IPG) — *Apr 2024 – Present*
Intel Corporation — Hillsboro, OR

Senior Staff Engineer — Apr 2026 – Present
Product Technical Lead — Apr 2025 – Mar 2026
Product Development Engineer — Apr 2024 – Mar 2025

- Leading end-to-end testchip data solutions for Intel's next-generation products across 14A, 18A, and Intel 7
- Achieved Product Technical Lead within one year of joining IPG, then promoted to Senior Staff Engineer in the following cycle
- Bridge product engineering and large-scale data analysis on critical testchips for upcoming Intel silicon
- Build analytical tooling and automation that scales across teams working on next-generation products

Intel Foundry Services (IFS) — *Nov 2017 – Mar 2024*
Intel Corporation — Hillsboro, OR

Staff Engineer — Apr 2021 – Apr 2024
Process Module and Integration Yield Engineer — Nov 2017 – Mar 2021

- Lead process engineer for one of Intel's first PowerVia testchips on Intel 18A
- Drove yield improvement programs across Intel 10 and 18A, owning process modules for flagship CPUs including Raptor Lake and Alder Lake
- Built JMP/JSL and Python automation that accelerated electrical test analysis and was adopted across process development teams
- Partnered with chip design, quality, and reliability teams to translate process changes into validated product-level requirements

EDUCATION

PhD, Electrical Engineering — *Sep 2013 – Oct 2017*
University of Michigan, Ann Arbor — GPA: 3.9/4.0
Thesis: III-Nitride Nanowire Based Near-Infrared Optoelectronic Devices on (001) Silicon

MBA (Six Specializations incl. Data Analytics) — *Jan 2021 – May 2023*
University of Illinois at Urbana-Champaign, Gies College of Business — GPA: 3.9/4.0

SELECTED ACCOMPLISHMENTS

- Intel CEO's Critical Talent Retention Award recipient
- Promoted two times in eight years at Intel — from Yield Engineer (2017) to Senior Staff Engineer (2026)
- President of India Gold Medal – ranked 1st among all engineering branches, class of 2013
- Rackham Graduate School Research Grant, University of Michigan

SELECTED PUBLICATIONS & PATENTS

16 journal papers, 31 conference papers, 2 book chapters, 2 media publications (~1,000 citations). Full list on Google Scholar. https://scholar.google.com/citations?user=Rae04WYAAAAJ&hl=en&oi=ao

- US Patent No. 10,305,250 B2 — *III-Nitride Nanowire Optoelectronics*
- "The Future of Electronics is Light." *The Conversation*, 2016. ~100,000 readers; top-read University of Michigan author for two months.
- Referee for 8 peer-reviewed journals including *Optics Express* and *Applied Optics*

- Top Journals:
  1. Arnab Hazari, Alexander Soibel, Sarath D. Gunapala, and Pallab Bhattacharya, "Infrared Absorption at 300 K in InGaN/GaN Disk-in-Nanowire Arrays Grown on (001) Silicon," IEEE Photonics Technology Letters, vol. 29, no. 20, pp. 1751–1754, Oct. 2017.
  2. Arnab Hazari, Fu Chen Hsiao, Lifan Yan, Junseok Heo, Joanna Mirecki-Millunchick, John M. Dallesasse, and Pallab Bhattacharya, "1.3 μm Optical Interconnect on Silicon: A Monolithic III-Nitride Nanowire Photonic Integrated Circuit," IEEE Journal of Quantum Electronics, vol. 53, no. 4, Aug. 2017.
  3. Arnab Hazari, Md. Zunaid Baten, and Pallab Bhattacharya, "A InN/InGaN/GaN Nanowire Array Guided Wave Photodiode on Silicon", Applied Physics Letters, 109 (191102), 191102-1-191102-4, 2016.
  4. Arnab Hazari, Anthony Aiello, Tien-Khee Ng, Boon S. Ooi, and Pallab Bhattacharya, "III-nitride disk-in-nanowire 1.2 um monolithic diode laser on (001)silicon", Applied Physics Letters, 107 (191107), 191107-1-191107-5, 2015.
  5. Arnab Hazari, Aniruddha Bhattacharya, Thomas Frost, Songrui Zhao, Md Zunaid Baten, Zetian Mi, Pallab Bhattacharya, "Optical constants of InxGa1-xN (0≤x≤0.73) in the visible and near-infrared wavelength regimes", Optics Letters, 40 (14), 3304-3307, 2015.
  6. Pallab Bhattacharya, Thomas Frost, Saniya Deshpande, M. Z. Baten, Arnab Hazari, and Ayan Das, "Room temperature electrically injected polariton laser," Physical Review Letters, 112 (23), 236802, 2014.

- Top Conferences:
  1. Arnab Hazari, Fu Chen Hsiao, Lifan Yan, Junseok Heo, Joanna M. Millunchick, John Dallesasse, and Pallab Bhattacharya, "1.3 um InN/InGaN/GaN Nanowire Array Diode Lasers and Photodiodes on (001) Silicon" EMC 2017, Notre Dame, IN, 2017.
  2. Arnab Hazari, Junseok Heo and Pallab Bhattacharya, "III-nitride nanowire array based 1.3um monolithic photonic integrated circuit on (001) silicon substrate", CLEO 2017, San Jose, CA, 2017.
  3. Arnab Hazari and Pallab Bhattacharya, "III-nitride nanowire array edge-emitting 1.3 um diode laser on (001) silicon", IPC 2016, Waikoloa, HI, 2016.
  4. Arnab Hazari, Md Zunaid Baten, and Pallab Bhattacharya, "Monolithic III-nitride nanowire detectors on silicon", IPC 2016, Waikoloa, HI, 2016.