

UPWARDS for the Future Network

Call for Applications

UPWARDS-UW Graduate Fellowship in Memory Technology Research

Background: The University Partnership for Workforce Advancement and Research & Development in Semiconductors (UPWARDS) for the Future program is dedicated to addressing the global semiconductor workforce shortage through an international collaboration between six U.S. universities, five Japanese universities, Micron Technology, and Tokyo Electron (TEL). Supported jointly by the National Science Foundation, Micron, and TEL, UPWARDS aims to create a US-Japan network to foster awareness and opportunities for the next generation of students and workforce in the global semiconductor ecosystem, with a particular focus on extending opportunities to underrepresented groups.

Memory-centric Research: Memory technology is foundational to all computing architectures and lies at the heart of Micron's expertise. Through UPWARDS, Micron is committed to providing students and researchers with unique opportunities to gain hands-on experience in research labs and cleanrooms, focusing on memory product development and production. They have particular interests in supporting research areas that include materials and chemical characterization for next-generation memory products, energy-efficient memory solutions, high-performance logic, tool design, and memory-centric computing models.

UPWARDS Graduate Fellowship: The UPWARDS-UW program calls for applications for up to **four** graduate fellowships in the College of Engineering and the College of Arts and Sciences. Each fellowship includes graduate research assistantship stipend plus benefits and tuition for 9-months of the 2024-2025 academic year. Each fellowship is renewable for up to one additional year based on satisfactory performance and review by a committee.

Selection Criteria:

- **Research Relevance:** Applicants must conduct research in areas relevant to memory technology as outlined above.
- **Promotion of Workforce Diversity:** Applicants show a strong commitment to contributing to expanding semiconductor workforce diversity by initiating and engaging in diversity programs.
- **Collaboration with UPWARDS Network Schools:** Proposed research activities should demonstrate potential for collaboration with other academic partners within the UPWARDS network.
- **Travel Commitment:** Fellows are expected to travel to Japan at least once to participate in or lead UPWARDS student exchange programs.

Application Requirements:

Applicants must submit the following documents to upwards@uw.edu with "UPWARDS Graduate Fellowship Application" in the subject line:

- CV/Resume
- Research statement addressing the selection criteria (2-page limit, font size 11 or larger)
- One recommendation letter from the applicant's research or academic advisor

Application Deadline: July 15th, 2024. Review will begin immediately, with fellowship awards announced in August for the 2024-2025 academic year.