

PhD student  
Tennessee Technological University

Direct Link: <https://www.AcademicKeys.com/r?job=253727>

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Posted Feb. 25, 2025, set to expire Jun. 27, 2025

<b>Job Title</b>	PhD student
<b>Department</b>	Mechanical Engineering
<b>Institution</b>	Tennessee Technological University Cookeville, Tennessee
<b>Date Posted</b>	Feb. 25, 2025
<b>Application Deadline</b>	Dec. 1, 2024
<b>Position Start Date</b>	Jan. 14, 2025
<b>Job Categories</b>	Graduate Student
<b>Academic Field(s)</b>	Robotics Mechatronics Mechanical Engineering Material/Metallurgy Manufacturing & Quality Engineering Industrial & Systems Engineering Computer Engineering Aerospace/Aeronautical/Astronautics

**Apply By Email**

**Job Description**

A Smart Manufacturing and Data Analytics Group (<https://sites.google.com/site/smandda/>) at Tennessee Tech. Univ. is hiring graduate students for this Spring 2025 or Fall 2025 semester. Potential applicants (e.g., Spring 2026 or after) can contact Dr. Duckbong Kim ([dkim@tntech.edu](mailto:dkim@tntech.edu)) to discuss their interests and possibilities. Tuition, stipend (\$2000 to \$2400/month for a PhD student), and travel for conferences will be financially supported. A visiting scholar (J-1 visa, post doc) will be supported by amount of \$3500 to \$4000/month).

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Our research group focuses on smart manufacturing and data analytics, such as industrial automation and robotics, additive manufacturing (AM), machine vision, data analytics, and decision support. Our current primary research is in AM technologies, specifically the wire+arc additive manufacturing. Despite significant progress in the AM field, a number of technical challenges remain, such as lack of standards/guidelines; modeling and simulation tools; AM design tools; data information management; limited number of available materials; and build capacity, processing time, certification, and qualification. Among those challenges, we are currently focusing on four main specific topics: 1) system development of WAAM process, 2) materials characterization (e.g., SEM and mechanical tests), 3) smart manufacturing, and 4) smart and functional materials. For detail information, please visit the web-site of Smart Manufacturing and Data Analytics Group.

Required background & knowledge: mechatronics, industrial automation and robotics, additive manufacturing, microstructure analysis, machine vision, optical engineering, welding, and programming (e.g., C++ and Python). Applicants should hold a baccalaureate or a master degree in a field of mechanical engineering, electrical engineering, computer science, industrial engineering or related-areas. Applicants should have earned a minimum of

- GPA: 3.0 on a 4.0 GPA scale (3.4 or the above preferred).
- GRE: Quantitative greater than 50%; Verbal greater than 33%; Writing greater than 33%
- TOEFL: 213 computer-based or 79 internet-based or can be replaced with TOEIC score.

If you are interested in this graduate study opportunity, please send your C.V. to Dr. Duckbong Kim ([dkim@tntech.edu](mailto:dkim@tntech.edu)). We are looking forward to seeing highly motivated applicants for graduate study.

Best regards,

Duckbong Kim, PhD

Associate Professor

Department of Manufacturing and Engineering Technology

Tennessee Technological University

Lewis Hall 111A

Phone: +1-931-372-3327, [dkim@tntech.edu](mailto:dkim@tntech.edu)

Home Page: <https://sites.google.com/site/smandda/>

ResearchGate: [https://www.researchgate.net/profile/Duck\\_Bong\\_Kim2](https://www.researchgate.net/profile/Duck_Bong_Kim2)

## Contact Information

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Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

**Contact**

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