
College of Engineering, Informatics, and Applied Sciences

Date: December 11, 2023
To: Andy Wang, Dean
From: Promotion and Tenure Committee,
College of Engineering, Informatics, and Applied Sciences
Subject: Review of Dr. Nghiem's application for promotion to Associate Professor with Tenure

At its meeting on December 6, 2023, the College of Engineering, Informatics, and Applied Sciences Promotion and Tenure Committee discussed and voted on the application of Dr. Nghiem for promotion to Associate Professor with Tenure in the School of Informatics, Cybersecurity and Computer Science (SICCS). On a three-tiered scale of "strong yes", "yes", and "no", there were four (4) strong yes votes, zero (0) yes votes, zero (0) no votes, and two (2) abstentions (by policy; to avoid the potential of a conflict of interest, the committee representative(s) from the academic unit of the applicant must abstain from the voting).

Dr. Nghiem completed his B.S. in Automatic Control, Hanoi University of Science and Technology, Hanoi, Vietnam in 2003, and his Ph.D. in Electrical & Systems Engineering from the University of Pennsylvania in 2012. Dr. Nghiem joined NAU in 2018 as an Assistant Professor in January, though his tenure clock began in the Fall of 2018.

Dr. Nghiem's distribution of work effort has averaged 24% Teaching and Student Related Activity, 63% Research and Scholarly Activity, and 13% Service Activity. He is currently in his sixth year as an Assistant Professor at NAU, so he is eligible for promotion.

The support application for Dr. Nghiem contained three letters, which included two arm's-length external reviewers, and one external reviewer that has collaborated with Dr. Nghiem. All three of these reviewers are tenured faculty who are active in research in Dr. Nghiem's field.

The support letters were strongly positive and included comments such as:

- 1) "Truong has set a high bar within our field and has been of strong benefit to other teachers and researchers."
- 2) "He has an outstanding track record of extramural funding, and I can attest that his research is strong and impactful."

- 3) "I am happy to strongly recommend Dr. Nghiem to be promoted to the rank of Associate Professor with tenure in your institute without any reservation."

Our review of Dr. Nghiem was conducted with respect to the specific unit criteria established by the SICCS COFS document, which was included in the review packet. Performance expectations in each of the three standard evaluation categories were based on the amount of effort allocated to those categories during the evaluation period. He has received Highly Meritorious ratings in each year for the Student Related Activities and Highly Meritorious in each year except his first for Scholarly Activity, and Highly Meritorious all years except one for the Service category. The following sections describe our findings in more detail.

STUDENT-RELATED ACTIVITIES

Dr. Nghiem's Statements of Expectations (SOE) indicate a mean workload of 24% in the Teaching and Student-Related Activity category. In this category, Dr. Nghiem has been highly meritorious in each annual evaluation over the past 5 years. He has developed or re-designed four courses, all at the graduate or senior level. In addition, he has also taught 10 undergraduate and graduate sections of other courses, and supervised 4 undergraduate students and 11 graduate students in individual study/research courses. He has received excellent student feedback and high evaluation scores. He has also advised 8 graduate students (mostly MS students), 10 undergraduate research students, and 9 Capstone project teams.

Dr. Nghiem has shown that he is committed to teaching and student success, as evidenced by his creating and re-working upper division and graduate level courses, and being readily available to work with both undergraduate and graduate students in individual and group research and project activities. He has published papers with his students and his student groups have been recognized for achievement with awards such as NAU Presidential Fellowship, Best Presentation Award, and his students have had good success in obtaining graduate positions at other academic institutions.

With regard to student advising, we note again Dr. Nghiem's advising of eight graduate students, ten undergraduate research students, and nine capstone teams. Though EE does not have a Ph.D. program, he has also served on the advising committee of PhD students outside of his program, including at an external institution.

In his application package, Dr. Nghiem demonstrates that he has significant accomplishments in developing and teaching important courses for the undergraduate and graduate programs, and also mentoring students. In summary, the committee finds that the record of Dr. Nghiem related to Student Related Activities exceeds the requirements established for tenure and promotion to Associate Professor.

SCHOLARSHIP

Dr. Nghiem's Statements of Expectations (SOE) indicates a Scholarship workload allocation average of 63% over five years. This dropped to 45% for Academic Year 2022-23 due to his taking on the role of Assistant Chair. His research develops the learning and control foundation of

intelligent cyber-physical systems, through synergistic integration of machine learning, control, and optimization, with applications in autonomous systems. Notable accomplishments include

- He is the recipient of the prestigious NSF CAREER award and the NSF ERI award.
- He has secured a total of \$10.8M in grant funding (\$10.7M in extramural grants) as PI and Co-PI, with \$2.32M under my direct management (\$2.3M in extramural grants), across federal funding agencies (NSF, ARL), industry, and professional organizations.
- In the last five years, he has submitted about 6.6 funding proposals per year on average.
- Since joining NAU, he has submitted 38 proposals (excluding small ones of less than \$10K), of which 2 are currently pending and 13 were funded (success rate: $13/36 = 36.1\%$); out of 13 NSF proposals, 2 are currently pending and 3 were funded with 2 as PI (success rate: $3/11 = 27.3\%$).
- Since joining NAU, he has published in highly reputable venues 28 papers, with 5 additional journal articles currently under review. Of these papers, he is the lead author or one of the lead authors on roughly 39%, students are co-authors on about 33% and lead authorship roles on about 21%. In the last five years, his number of citations has increased from 491 to 1208 with the h-index rising from 11 to 18.
- On average over 5 years, he has submitted 10 papers/year, published 5.2 papers/year, submitted 6.6 grant proposals/year, and managed directly \$120.5K/year of annual active funding

In summary, the committee finds that the record of Dr. Nghiem exceeds the requirements established for tenure and promotion to Associate Professor in the area of Scholarship.

SERVICE

Dr. Nghiem's Statement of Expectations (SOE) average a 13% Service workload. He has received a Highly Meritorious rating in each year but one, for which he was awarded a Meritorious rating. Highlights of his Service accomplishments include:

- Service to the profession: He has reviewed papers for 8 different journals and 9 different conferences (multiple times for each), been a grant proposal panelist for three NSF review panels, led the organization of and co-chaired a well-received tutorial session at the 2023 American Control Conference, had membership on technical program committees, chaired or co-chaired technical sessions at premier conferences, and given 5 invited talks.
- Service to the university: He has been on several high impact committees, including three faculty search committees, the SICCS Annual Review Committee (ARC) / Faculty Status Committee (FSC), the University Graduate Committee (UGC), the academic integrity committee, and ECE undergraduate and graduate curriculum committees (as member and chair) over multiple years.
- He was Assistant Chair of ECE of SICCS in AY 2022–2023. In this role, he co-developed (recently approved) proposals for improving the PhD program and for a new PhD emphasis area in ECE, and has been assisting the development of a new certificate program in semiconductors/microelectronics.

In summary, the committee finds that the record of Dr. Nghiem exceeds the requirements established for tenure and promotion to Associate Professor in the area of Service.

SUMMARY

The committee finds that Dr. Nghiem's combined overall performance exceeds the requirements for tenure and promotion to Associate Professor. Based on our review, the committee finds that he should be **Recommended for Tenure and Promotion** to Associate Professor.

Dr. Nghiem has five working days to upload a written response to the Dean into Faculty180 regarding this recommendation.

College Promotion & Tenure Committee members:



Dr. Zachary F Lerner - Chair, P&T Committee, ME



Dr. Michael Gowanlock - Member, P&T Committee, SICCS



Dr. Rand Decker – Member, P&T Committee, CECMEE



Dr. Peter Vadasz – Member, P&T Committee, ME



Dr. Morgan Vigil-Hayes - Member, P&T Committee, SICCS



Dr. Wilbert Odem – Member, P&T Committee, CECMEE