NAU NORTHERN ARIZONA UNIVERSITY

School of Informatics, Computing, and Cyber Systems

TO: Paul Flikkema, Director
CC: Truong Nghiem, Assistant Professor
FROM: James Palmer (co-chair), Frederic Loulergue (co-chair), Kiona Ogle, Marco Aurelio Gerosa, Temuulen Sankey, Venkata Yaramasu

DATE: 09/26/2018

SUBJECT: Tenure Track Annual Review AY17-18: Truong Nghiem

This letter serves to document the School of Informatics, Computing, and Cyber Systems Faculty Status Committee's evaluation of Dr. Nghiem as an Assistant Professor for academic year 2017-2018 (AY17-18)—this was Dr. Nghiem first semester as an NAU faculty member having officially started his contract in January of 2018. According to Dr. Nghiem's offer letter, his distribution of effort for this time period was as follows: Student-related Activities at 5%, Scholarly Activities at 85%, and Service at 10%.

Dr. Nghiem was evaluated with respect to criteria appropriate to his rank and career stage in each activity category and with a consideration of his allocation of effort. This evaluation is based on the material submitted by the faculty being evaluated in the Professional Review File (PRF) and in the Faculty Activity and Achievement Reporting (FAAR) system, on the NAU Conditions of Faculty Service (COFS) guidelines, on the College of Engineering, Informatics, and Applied Sciences Process Guidelines for Annual Evaluation, Promotion, and Tenure, and our own observations.

Student-related Activities (5%; *Highly Meritorious*)
Dr. Nghiem created a new class proposal for EE558 (a graduate version of Automatic Controls), which will be evaluated and submitted in Fall 2018. He has also prepared a catalog change for EE448 and has done course preparation for EE599 (being taught in Fall 2018). During this period, he has also been mentoring students and engaging students in undergraduate research experiences. This includes Falon Ortega who was awarded a Hooper Undergraduate Research Award (HURA) to work in Dr. Nghiem's lab. The committee looks forward to evaluating Dr. Nghiem's student-related activities in greater detail in future years after he has had the opportunity to engage students in the class room.

The committee finds these activities substantially exceed expectations for the workload allocation in this area of activity and recommends a rating of *highly meritorious*.

Scholarly Activities (85%; *Highly Meritorious*)
During AY17-18, Dr. Nghiem began building his research agenda at NAU. This included developing a pipeline of undergraduate and graduate students to support his lab. His scholarly activity also included the submission of four proposals. One proposal for $60,369 as co-PI with PI Venkata Yaramasu from the Salt River Project was awarded. Dr. Nghiem also contributed to three manuscripts that have either been accepted for publication or have been published. The ICCPS paper, where Dr. Nghiem was 2nd author, received the best paper award. The ICCPS conference is the flagship conference in Dr. Nghiem's area. Dr. Nghiem also notes that he participated in several NAU professional development events geared toward grant development and preparation.

The committee finds these activities substantially exceed expectations for the workload allocation in this area of activity and recommends a rating of *highly meritorious*.

Service Activities (10%; *Highly Meritorious*)
During AY17-18, Dr. Nghiem engaged in a number of service activities. This included service on the NAU Energy Action Team / Environmental Caucus, the SICCS Graduate Affairs Committee, and the Graduate Seminar Series. Dr. Nghiem also provided service to the profession by being a reviewer for four different conferences related to controls, automation, and cyber-physical systems.

The committee finds these activities substantially exceed expectations for the workload allocation in this area of activity and recommends a rating of *highly meritorious*.

Overall Performance Rating (*Highly Meritorious*)
Based on the individual performance of the faculty being evaluated in each of the three categories just described, our recommendation is an overall rating of *highly meritorious*.

Retention Recommendation and Progress Toward Tenure (*Recommended for Retention*)
The review committee finds that Dr. Nghiem is making significant and positive progress toward promotion and tenure and strongly recommends retention in his position. Should this level of productivity and achievement be sustained, the review committee is confident that Dr. Nghiem will be successful in his promotion and tenure application.

The committee notes that any response to this evaluation should be submitted in writing to the Director within seven days of receipt.

NAU NORTHERN ARIZONA UNIVERSITY

School of Informatics, Computing, and Cyber Systems

TO: Benjamin Ruddell, Director
CC: Truong Nghiem, Assistant Professor
FROM: Frédéric Loulergue (chair), Marco Aurelio Gerosa, Crystal Hepp, Scott Goetz, Morgan Vigil-Hayes, Abolfazl Razi, Venkata Yaramasu
DATE: 11/05/2019

SUBJECT: Tenure Track Annual Review AY18-19: Truong Nghiem

This letter serves to document the School of Informatics, Computing, and Cyber Systems Faculty Status Committee's evaluation of Dr. Nghiem as an Assistant Professor for academic year 2018-2019 (AY18-19). Dr. Nghiem joined NAU in January of 2018 as an Assistant Professor, making AY18-19 his second year. Dr. Nghiem's Statement of Expectations states a distribution of effort as follows: Student-related Activities at 15%, Scholarly Activities at 75%, and Service at 10%.

Dr. Nghiem was evaluated with respect to criteria appropriate to his rank and career stage in each activity category and with a consideration of his allocation of effort. This evaluation is based on the material submitted by the faculty being evaluated in the Professional Review File (PRF) and in the Faculty Activity and Achievement Reporting (FAAR) system, on the NAU Conditions of Faculty Service (COFS) guidelines, on the College of Engineering, Informatics, and Applied Sciences Process Guidelines for Annual Evaluation, Promotion, and Tenure, and our own observations. The ratings we use reflect the four performance categories used in faculty performance: unsatisfactory, satisfactory, meritorious, and highly meritorious.

Student-related Activities (15%; *Highly Meritorious)*
During the Fall 2018 semester, Dr. Nghiem taught one course: EE599 *Digital Control Systems* with a total enrollment of 18 students. The class was a new preparation for him, and he reported no grader support for this class. With a 100% response rate, students responded to evaluation questions with an average 3.41, with individual averages from 3.2 to 3.6. Dr. Nghiem has implemented hardware-based projects for this course that significantly contributed to the improvement of the course offering. Dr. Nghiem also used iClicker and Piazza site, and chapter review sessions in this course to facilitate effective communication with students. Many students had positive comments about Dr. Nghiem's teaching style and the course content. However, some students expressed demand for more examples and details on lecture notes.

Dr. Nghiem successfully recruited two new PhD students during AY18-19. Dr. Nghiem has nominated one of his PhD students for the NAU Presidential Award who ultimately received the award. His other PhD student has submitted two conference papers with Dr. Nghiem in Spring 2019 and Summer 2019 (one accepted and one under review).

Dr. Nghiem mentored one undergraduate student during the Spring 2018 semester, who awarded a Hooper Undergraduate Research Award (HURA) of $3,465 to participate in research in his lab during AY18-19. He also mentored another CS undergraduate student enrolled in independent undergraduate research (CS 485). His research resulted in an accepted presentation in the 2019 Annual Student Conference on Renewable Energy Science, Technology, and Policy at the Energy-Water-Food Nexus (AZSEC) to be held

in November 2019. Additionally, Dr. Nghiem has supervised three capstone teams with a total of 12 students during AY18-19.

For Dr. Nghiem's second year, the committee finds these activities *substantially exceed* the workload allocation in this area of activity and recommends a rating of *highly meritorious*.

Scholarly Activities (75%; *Meritorious*)
During AY18-19 including Summer 2019, Dr. Nghiem engaged in grant writing by submitting one proposal as the lead PI, five proposals as Co-PI, and one proposal as Senior Personnel to NSF and other funding opportunities. Dr. Nghiem reports two funded projects including a Salt River Project (SRP) award at the amount of $60,369 as Co-PI, and an IEEE award at the amount of $14,976 (+ $7,000 match fund) as the Sole PI.

Dr. Nghiem reports one journal article (accepted), six peer-reviewed conference papers (three accepted, one rejected, two pending review), one conference abstract (presented), and two technical reports. Most papers were submitted to highly accredited venues.

The committee finds these activities *exceed* expectations for the workload allocation in this area of activity and recommends a rating of *meritorious*.

Service Activities (10%; *Highly Meritorious*)
During AY18-19, Dr. Nghiem served on the NAU Energy Action Team, which is part of the NAU Environmental Caucus. He also reported serving on the SICCS FSC/ARC Committee, participating in ABET meetings, and serving on the CEIAS Academic Integrity Hearing Board on one case. In collaboration with two other SICCS faculty, he organized the SICCS Graduate Seminar Series with several seminars in Fall 2018 and Spring 2019. He was involved in interviewing three faculty candidates for the EE Professor of Practice position. He served as a panelist in one NSF program as well as the AI panel at the Flagstaff Festival of Science 2018. He served as the technical program committee member in one IEEE conference and provided review service for one journal and several IEEE conferences.
Dr. Nghiem also reports one article about his research activities in the November 2018 issue of the Arizona's TechConnect magazine as part of his service activities. The committee requests him to report dissemination-related activities under the Scholarly-activities category.

The committee finds these activities *substantially exceed* expectations for the workload allocation in this area of activity and recommends a rating of *highly meritorious*.

Overall Performance Rating (*Meritorious*)
Based on the individual performance of the faculty being evaluated in each of the three categories just described, our recommendation is an overall rating of *meritorious*.

Retention Recommendation and Progress Toward Tenure (*Recommended for Retention*)
The review committee finds that Dr. Nghiem is making positive progress toward promotion and tenure and strongly recommends retention in his position. Should this level of productivity and achievement be sustained, the review committee is confident that Dr. Nghiem will be successful in his promotion and tenure application.

The committee notes that any response to this evaluation should be submitted in writing to the Director within seven days of receipt.

NAU NORTHERN ARIZONA UNIVERSITY

School of Informatics, Computing, and Cyber Systems

TO: Benjamin Ruddell, Director
CC: Truong Nghiem, Assistant Professor
FROM: *School of Informatics, Computing, and Cyber Systems Faculty Status Committee*: Marco Aurelio Gerosa (chair), Paul Flikkema, Crystal Hepp, Jarrett J Barber, Abolfazl Razi

DATE: 09/26/2020

SUBJECT: **3-5 Year Tenure-Track Annual Review AY19-20: Dr. Truong Nghiem**

This letter serves to document the School of Informatics, Computing, and Cyber Systems (SICCS) Faculty Status Committee's evaluation of Dr. Nghiem as a tenure-track Assistant Professor for academic year 2019-2020 (AY19-20). Dr. Nghiem joined SICCS in January 2018. According to Dr. Nghiem's Statement of Expectations (SOE) for AY19-20, his distribution of effort for this time period was as follows: Student-related Activities at 15%, Scholarly Activities at 75%, and Service at 10%. However, the committee notes that his allocation was changed to Student-related Activities at 22.5%, Scholarly Activities at 67.5%, and Service at 10% in his self-evaluation. Given his documented teaching-related activities, we deem this change appropriate.

Dr. Nghiem was evaluated with respect to criteria appropriate to his rank and career stage in each activity category and with a consideration of his allocation of effort. This evaluation is based on the material submitted by the faculty being evaluated in the Professional Review File (PRF) and in the Faculty Activity and Achievement Reporting (FAAR) system, and the SICCS Conditions of Faculty Service Guidelines (rev. 6/27/2018) ("SICCS CoFS"), as well as on the NAU Conditions of Faculty Service (COFS) guidelines, on the College of Engineering, Informatics, and Applied Sciences Process Guidelines for Annual Evaluation, Promotion, and Tenure, and this committee's observations and deliberations. The ratings we use reflect the four performance categories used in faculty performance: unsatisfactory, satisfactory, meritorious, and highly meritorious.

Student-related Activities (22.5%; *Highly Meritorious)*
Dr. Nghiem taught EE 458 Automatic Controls to a class of 21 students during fall semester 2019. With a 95%/60% lecture/lab student response rate, he received a 3.3/3.5 (lecture/lab) average evaluation score. Dr. Nghiem has introduced modern tools—Matlab, Simulink, and Arduino—into the EE 458 laboratory to give students physical intuition and hands-on skills that reinforce theoretical concepts. These tools, especially Matlab and Simulink, are also being used more and more in industry, a plus for preparing students for EE careers.

Dr. Nghiem taught EE 499 Introduction to Autonomous Driving to a class of 10 students during spring semester 2020. With a 40% student response rate, he received a 3.5 average evaluation score. This course presented a highly-current topic, supported by elements of machine learning and robotics, all of which are motivating and exciting for students. It is unfortunate that the course is not offered this academic year.

Dr. Nghiem also guided a student in an EE 485 experience in spring 2020, accommodating a highly motivated student who could not take EE 499 due to a time conflict, and supervised an I2S student in the same topic area.

While the traditional discipline of control systems is key to undergraduate EE education, Dr. Nghiem has gone well beyond traditional offerings by adding hands-on experiences and applications to his courses. He has also endeavored to improve his courses in this area, gaining financial support from the IEEE Control Systems Society to develop five scale-model autonomous car platforms for his courses and independent-study learning experiences.

Overall, we believe that while Dr. Nghiem has already demonstrated excellence in teaching, we commend him for his efforts to improve the content and pedagogy of his courses; it is clear from the detailed documentation that he cares deeply about his students and their learning experiences.

At the graduate level, Dr. Nghiem recruited two Ph.D. students who began research in their first years; one of them submitted two papers that were published in AY 19-20.

The committee finds these activities *substantially exceed* expectations for the workload allocation in this area of activity and recommends a rating of *highly meritorious*.

Scholarly Activities (67.5%; *Highly Meritorious*)
Dr. Nghiem has been very active in research. His track record includes 10 submitted papers; of these, 5 were accepted and 2 are in review. Venues include the prestigious *IEEE Allerton and Asilomar* conferences and the *IEEE Transactions on Control Systems Technology*. One product was an abstract/presentation at a student conference, which won an award. He was also PI or co-PI on 6 submitted proposals, and is already collaborating with researchers at other institutions. We encourage Dr. Nghiem to continue to submit a balanced portfolio of proposals, both individually and as a part of collaborative teams.

Dr. Nghiem's invited seminar at Lawrence Berkeley National Laboratory, a leading research center in building science and engineering, testifies to Dr. Nghiem's national reputation in environmental and energy control systems for buildings and machine learning. The committee notes that Dr. Nghiem is leveraging his expertise in a unique and relevant NAU-internal proposal to estimate room occupancy and ventilation quality, a potentially important new technology in the context of the covid-19 pandemic.

The committee finds these activities *substantially exceed* expectations for the workload allocation in this area of activity and recommends a rating of *highly meritorious*. The committee thanks Dr. Nghiem for carefully documenting his contributions to manuscripts and proposals, and providing information on the quality of publication venues for papers.

Service Activities (10%; *Meritorious*)
Dr. Nghiem's contributions in the area of Service were strong and well-balanced across department, institution, and professional areas. Especially noteworthy were his work for the NAU Energy Action Team and Environmental Caucus, the University Graduate Committee, and service as a reviewer for journals and conferences.

The committee finds these activities *exceed* expectations for the workload allocation in this area of activity and recommends a rating of *meritorious*.

Overall Performance Rating (*Highly Meritorious*)
Based on the individual performance of Dr. Nghiem in each of the three categories, our recommendation is an overall rating of *highly meritorious*. As well, the committee commends Dr. Nghiem for his exceptionally thorough documentation of his accomplishments.

Retention Recommendation and Progress Toward Tenure (*Recommended for Retention*)
The review committee finds that Dr. Nghiem is making significant and positive progress toward promotion and tenure and strongly recommends retention in his position.

The committee notes that any response to this evaluation should be submitted in writing to the Director within seven days of receipt.

NORTHERN ARIZONA UNIVERSITY

School of Informatics, Computing, and Cyber Systems

TO: Benjamin Ruddell, Director
CC: Truong Nghiem, Assistant Professor
FROM: *School of Informatics, Computing, and Cyber Systems Faculty Status Committee*: Marco Aurelio Gerosa (chair), Andrew Richardson, Kevin Gurney, Crystal Hepp, Jarrett J Barber, Wold-Dieter Otte, Truong Nghiem (excused from this review), Michael Gowanlock, Toby Hocking

DATE: 09/16/2021 *Should have been AY20-21*

SUBJECT: **3-5 Year Tenure-Track Annual Review AY19-20: Dr. Truong Nghiem**

This letter serves to document the School of Informatics, Computing, and Cyber Systems (SICCS) Faculty Status Committee's evaluation of Dr. Nghiem as a tenure-track Assistant Professor for academic year 2020-2021 (AY20-21). Dr. Nghiem joined SICCS in January 2018. Last year, due to the impacts of COVID-19, Dr. Nghiem requested for and was approved a one-year extension to his tenure clock. Consequently, he will be eligible to apply for tenure in AY24-25.

According to Dr. Nghiem's Statement of Expectations (SOE) for AY20-21, his distribution of effort for this time period was as follows: Student-related Activities at 27%, Scholarly Activities at 63%, and Service at 10%.

Dr. Nghiem was evaluated with respect to criteria appropriate to his rank and career stage in each activity category and with a consideration of his allocation of effort. This evaluation is based on the material submitted by the faculty being evaluated in the Professional Review File (PRF) and in the Faculty Activity and Achievement Reporting (FAAR) system, and the SICCS Conditions of Faculty Service Guidelines (rev. 6/27/2018) ("SICCS CoFS"), as well as on the NAU Conditions of Faculty Service (COFS) guidelines, on the College of Engineering, Informatics, and Applied Sciences Process Guidelines for Annual Evaluation, Promotion, and Tenure, and this committee's observations and deliberations. The ratings we use reflect the four performance categories used in faculty performance: unsatisfactory, satisfactory, meritorious, and highly meritorious.

Student-related Activities (27%; *Highly Meritorious*)

Dr. Nghiem has taught EE458 Automatic Controls in the Fall 2020. With a 100/83.33% (lecture/lab) student response rate, he received a 3.8 average evaluation score with the highest score for clear grading criteria and the lowest for course organization. The committee commends Dr. Nghiem for his efforts to experiment with the flipped classroom model and his developing simulation-based labs, as clearly evidenced in his strong and well-balanced student evaluations.

In the spring 2021 Dr. Nghiem taught EE222 Intermediate Programming, which he taught for the first time and does not lie in his area of expertise. With a 60.5% student response rate, he received a 3.26 average evaluation score with the highest score for clearly stated grading criteria and clearly stated course requirements, and the lowest score for lack of constructive feedback. The committee agrees that this course is especially challenging to teach, due to the widely varying skill sets of the two different student

cohorts from CS/ACS and EE. The student evaluations reflect this strong division that is outside the control of the instructor. On the other hand, the committee finds that Dr. Nghiem dedicated a substantial amount of time and energy to prepare the class offering, employing the zyBook service, which most of the students clearly benefitted from.

Dr. Nghiem reports that he needed to develop the material almost from scratch, as only few materials of prior class offerings were shared with him. The committee notes, however, that EE222 is a well-established course in the EE programs, that has been taught by numerous instructors in the past. We would like to encourage Dr. Nghiem to actively seek help with course preparations and reusing prior course materials to eliminate the need to prepare a class from scratch.

Dr. Nghiem has a robust record of mentoring graduate students and integrating them in his research activities. Of note are his supervision of two master's students. With one of the students, he published three conference papers, while this same student also submitted one journal paper to the highest-ranking journal in his area.

Dr. Nghiem's efforts demonstrate strong teaching effectiveness and a dedication to continuous pedagogical and subject matter improvements while his mentorship is clearly supportive of student success. The committee finds that Dr. Nghiem's achievements in student-related activities *meet and in part exceed* the expectations for the workload allocation in this area of activity and recommends a rating of *highly meritorious*.

Scholarly Activities (63%; *Highly Meritorious*)

In the area of scholarly activities, Dr. Nghiem has continued to build a well-established research agenda, which promises a successful future career trajectory.

He is a Co-PI on a large project over $1.366M (20%, PI Dr. Flikkema) that received funding just recently. He also contributed to three smaller projects, with funding amounts between $5k to $20k.

In AY20-21 he submitted three large grant proposals, two proposals as a PI. The largest project shows a funding amount of an impressive ~$10M (i.e., $7M DOE funding, plus $3M contributed by APS). His dossier clarifies that he is the *de facto* PI on the proposal, while the PI on paper was chosen to be Dr. Acker for political and funding requirements reasons.

One grant proposal over $250k (PI) is in preparation and is expected to be submitted in this fall.

Dr. Nghiem was also very active disseminating his scholarly work. He contributed to eight peer-reviewed publications, four of which are journal papers. He is the first author in two of these publications, all other papers were written under his supervision by his students. One of the papers was withdrawn due to a mismatch of the paper's topic versus the scope of the journal.

Finally, Dr. Nghiem gave two invited talks.

The committee commends Dr. Nghiem for his success in the area of scholarly achievements and finds that his record substantially exceeds the requirements for promotion and tenure and recommends a rating of *highly meritorious*.

Service Activities (10%; *Highly Meritorious*)

Dr. Nghiem demonstrated strong commitment to his profession. He served as a panelist for NSF's Cyber Physical System program, where he reviewed eight proposals. He chaired a technical session "Model Predictive Control" at the IEEE Conference on Control Technology and Applications (CCTA) 2021, which is a top conference in his field. He also reviewed six papers in his area of expertise.

At the university level, Dr. Nghiem served on the University Graduate Committee (UGC) and on the Energy Action Team / Environmental Caucus.

The committee encourages Dr. Nghiem to consider balancing his service activities between university committees and his commitment to his professional community to leave some space for activities at the college and/or SICCS levels.

The committee finds these activities *substantially exceed* expectations for the workload allocation in this area of activity and recommends a rating of *highly meritorious*.

Overall Performance Rating (*Highly Meritorious*)

Based on the individual performance of Dr. Nghiem in each of the three categories, our recommendation is an overall rating of *highly meritorious*.

Retention Recommendation and Progress Toward Tenure (*Recommended for Retention*)

The review committee finds that Dr. Nghiem is making positive progress toward promotion and tenure and strongly recommends retention in his position.

The committee notes that any response to this evaluation should be submitted in writing to the Director within seven days of receipt.

NAU NORTHERN ARIZONA UNIVERSITY

School of Informatics, Computing, and Cyber Systems

TO: Viacheslav (Slava) Fofanov, Director
CC: Truong X. Nghiem, Assistant Professor
FROM: *Annual Review Committee (ARC)*: Marco Aurelio Gerosa (chair), Andrew Richardson, Jarrett J Barber, Venkata Yaramasu, Benjamin Ruddell, Toby Hocking, Igor Steinmacher, Ying-Chen Daphne Chen, Marc Tollis, Tara Furstenau

School of Informatics, Computing, and Cyber Systems Faculty Status Committee (FSC): Andrew Richardson, Jarrett J Barber, Venkata Yaramasu, Benjamin Ruddell
DATE: 09/27/2022

SUBJECT: 3-5 Year Tenure-Track Annual Review AY21-22: Dr. Truong X. Nghiem

This letter serves to document the School of Informatics, Computing, and Cyber Systems (SICCS) Faculty Status Committee's evaluation of Dr. Truong Nghiem as a tenure-track Assistant Professor for the academic year 2021-2022 (AY21-22). Dr. Truong joined SICCS in the Spring semester 2018. According to Dr. Truong X. Nghiem's Statement of Expectations (SOE) for AY21-22, his distribution of effort for this time period was as follows: Student-related Activities at 25%, Scholarly Activities at 65%, and Service at 10%.

Dr. Truong X. Nghiem was evaluated with respect to criteria appropriate to their rank and career stage in each activity category and with a consideration of their allocation of effort. This evaluation is based on the material submitted by the faculty being evaluated in the Professional Review File (PRF) and in the Faculty Activity and Achievement Reporting (FAAR) system, and the SICCS Conditions of Faculty Service Guidelines (rev. 6/27/2018) ("SICCS CoFS"), as well as on the NAU Conditions of Faculty Service (COFS) guidelines, on the College of Engineering, Informatics, and Applied Sciences Process Guidelines for Annual Evaluation, Promotion, and Tenure, and this committee's observations and deliberations. The ratings we use reflect the four performance categories used in faculty performance: unsatisfactory, satisfactory, meritorious, and highly meritorious.

Student-related Activities (25%; *Highly Meritorious)*
Dr. Nghiem taught EE458 Automatic Controls to a class of 14 students during Fall semester 2021. With a 92.86% (lecture) and 92.31(lab) student response rate, he received 3.64 and 3.73 average evaluation scores. Besides regular classes, he offered an Honor section (EE 458H) to a student who need an honor project to graduate. However, she struggled and failed the class in the end. The instructor explained comprehensively the effort and communications he spent on the case. While most students had positive things to say about the course and its teaching, there were some concerns expressed such as students needing more guidance in labs. The instructor explained the approach to avoid the sharing concern on hand-writing answers. In his self-evaluation, Dr. Nghiem reflects on student remarks and makes proposals to take them into account for subsequent course offerings such as using a whiteboard for in-class engagement. Dr. Nghiem is suggested that he continue to improve this already well-structured class.

Dr. Nghiem taught EE599 Modern Control Systems to a class of 12 students during Spring semester 2022. With a 100% student response rate, he received a 3.51 average evaluation score. This is a new graduate course firstly offered at NAU. While most students had positive things to say about the course and its

teaching, there were some concerns expressed about needing more guidance on labs, updating the homework answers online, etc. The instructor explained the approach to avoid the students sharing concerns about handwriting answers. In his self-evaluation, Dr. Truong reflects on student remarks and makes proposals to take them into account for subsequent course offerings. The committee finds that Dr. Nghiem dedicated a substantial amount of time and energy to preparing content for this new class offering such as slides, lecture notes, assignments, quizzes, projects, and exams.

Dr. Nghiem supervised 3 Master's students during the academic year. The students all completed the projects successfully. He also has mentored on a Capstone project which includes 5 undergraduate students. He recruited one new Ph.D. student starting in Summer 2022.

The committee finds these activities *substantially exceed* expectations for the workload allocation in this area of activity and recommends a rating of *highly meritorious*.

Scholarly Activities (65%; *Highly Meritorious*)
During AY21-22, Dr. Truong X. Nghiem has been very active in this area. He is a Co-PI on a large project of over $1.366M (20%, PI Dr. Flikkema) that received funding continuously to 2024. He has been awarded a two-year NSF grant of ~$200K as a sole PI. He is PI (75%) and co-PI (25%) for SRP grants 67K and 70K, respectively. He also awards a small NAU internal grant of $5K. He submitted 8 additional proposals, 3 are pending and 5 were declined. He participated in the submission of 8 grant proposals and works on 5 funded projects for a total well exceeding $91K of direct funds under his management in AY21-22.

He published 2 journals (h-index: 158, h-index: 44) and 2 conferences (h-index: 129, h-index: 128) including IEEE conferences and journals, which are publications of good quality. He also has 4 other journal papers and 1 other conference paper in submission and is currently under review. The work clearly involves collaborations with a number of colleagues outside NAU, as well as NAU graduate students.

The committee finds these activities *substantially exceed* expectations for the workload allocation in this area of activity and recommends a rating of *highly meritorious*.

Service Activities (10%; *Highly Meritorious*)
During AY21-22, Dr. Truong X. Nghiem made numerous contributions to his professional community. He served on 1 NSF review panel. He served on the technical program committees of 1 international workshop in the areas of control and robotics in Vietnam. He also reviewed four papers in his area of expertise (a total of 71 hours).

Within the university, Dr. Truong X. Nghiem's service included two university-level committees, i.e. Energy Action Team at NAU, and the University Graduate Committee (UGC), and many departmental services (a total of 128 hours).

The committee finds these activities *substantially exceed* expectations for the workload allocation in this area of activity and recommends a rating of *highly meritorious*.

Overall Performance Rating (*Highly Meritorious*)
Based on the individual performance of the faculty being evaluated in each of the three categories just described, our recommendation is an overall rating of *highly meritorious*.

Retention Recommendation and Progress Toward Tenure (*Recommended for Retention*)
The FSC committee finds that Dr. Truong X. Nghiem is making significant and positive progress toward promotion and tenure and strongly recommends retention in his position.

The committee notes that any response to this evaluation should be submitted in writing via NAU's Faculty Activity and Achievement Reporting (FAAR) system, with a copy by email to the Director, within seven days of receipt.

NORTHERN ARIZONA UNIVERSITY

School of Informatics, Computing, and Cyber Systems

Memo

To: Diane Stearns, Dean, College of Engineering, Informatics & Applied Sciences (CEIAS)
From: Paul Flikkema, Director, School of Informatics, Computing & Cyber Systems (SICCS)
CC: Truong Nghiem
Date: 2 October 2018

Re: AY 2017-2018 Second-Year Review for Truong Nghiem

In compliance with university policies, it is my responsibility to conduct annual reviews of SICCS faculty and prepare written performance reviews documenting my findings.

This review is of Dr. Nghiem's first year of service. This review is conducted with reference to Dr. Nghiem's letter of offer that identifies activities and accomplishments expected during the first year of service, as well as (i) the CEIAS Process Guidelines for Annual Evaluation, Promotion, and Tenure (2018) and (ii) the NAU Conditions of Faculty Service (2013).

This review addresses my evaluation of both Dr. Nghiem's record of accomplishments in AY 2017-2018 and his trajectory towards tenure and promotion. It does so in the context of documentation of accomplishments compiled by Dr. Nghiem. This review is independent of the SICCS Faculty Status Committee's evaluation. However, it references information in the committee's evaluation.

I note that Dr. Nghiem started at NAU in January 2018, so this evaluation is for only one semester.

Research: Dr. Nghiem has been very active in his first year, demonstrating balanced productivity across proposals and publications. I rate Dr. Nghiem's performance in the area of Research as **Highly Meritorious**.

Teaching: Dr. Nghiem quickly engaged in planning and developing a sustainable set of courses in the area of control systems, which is highly important to increasing the quality of our undergradate and graduate programs in EE. He also started mentoring a HURA student. I rank Dr. Nghiem's performance in this area as **Highly Meritorious**.

Service: I rate Dr. Nghiem's work in Service as **Highly Meritorious**; especially noteworthy is his service on the SICCS Graduate Affairs Committee and his contributions to the NAU Energy Action Team; the latter involvement has strong synergy with his research.

Summary: I agree with the committee that Dr. Nghiem's overall performance is **Highly Meritorious**. With respect to his estimated trajectory toward tenure and promotion, Dr. Nghiem's outstanding performance all three categories in his first semester indicates that he is well-positioned to continue his development as both a researcher and teacher.

I strongly recommend that Dr. Nghiem be reappointed for the 2019/2020 academic year.

Tenure-Track Annual Review by Director

AY 2018-2019

ANNUAL REVIEW AND RETENTION

Indicate ratings and retention recommendation; text of evaluation to be entered in "standard evaluation input."

C Annual review merit score (1=unsatisfactory; 2=satisfactory; 3=meritorious; 4=highly meritorious)

Student-related score	4
Scholarship/creative activity score	3
Service score	4
Other score (if applicable)	NA
Overall score	3

D Retention recommendation

Retention recommendation	Yes

E Standard Evaluation Input

Evaluation	The SICCS Director confirms the overall rating of Meritorious. Dr. Nghiem is encouraged to aggressively develop larger externally funded projects in the lead PI role, which is an expectation at this level of research workload.

AY 2019-2020

ANNUAL REVIEW AND RETENTION

Indicate ratings and retention recommendation; text of evaluation to be entered in "standard evaluation input."

C Annual review merit score (1=unsatisfactory; 2=satisfactory; 3=meritorious; 4=highly meritorious)

Student-related score	4
Scholarship/creative activity score	3
Service score	3
Other score (if applicable)	NA
Overall score	3

D Retention recommendation

Retention recommendation	Yes

E Standard Evaluation Input

Evaluation	The SICCS Director adjusts Dr. Nghiem's overall review to Meritorious for AY2020, corresponding to an adjustment of the Scholarship category to Meritorious. Dr. Nghiem is encouraged to continue and accelerate efforts to win six and seven figure external awards in the lead PI role. This type of success will be essential for his tenure application. Dr. Nghiem is encouraged to take on more SICCS service work in the coming year.

AY 2020-2021

ANNUAL REVIEW AND RETENTION

Indicate ratings and retention recommendation; text of evaluation to be entered in "standard evaluation input."

C Annual review merit score (1=unsatisfactory; 2=satisfactory; 3=meritorious; 4=highly meritorious)

Student-related score	4
Scholarship/creative activity score	4
Service score	4
Other score (if applicable)	NA
Overall score	4

D Retention recommendation

Retention recommendation	Yes

E Standard Evaluation Input

Evaluation	The Director of SICCS concurs with the ARC's recommendation of an overall Highly Meritorious review. Dr. Nghiem is encouraged to continue prioritizing publication of peer reviewed articles and especially efforts to submit significant grant proposals in the lead PI role. Lead PI funding and strong publication track records are important for the tenure evaluation.

NORTHERN ARIZONA UNIVERSITY

School of Informatics, Computing, and Cyber Systems

Memo

To: Andy Wang, Dean, College of Engineering, Informatics & Applied Sciences (CEIAS)
From: Viacheslav (Slava) Fofanov, Director, School of Informatics, Computing & Cyber Systems (SICCS)
CC: Truong Nghiem
Date: October 21, 2022

Re: AY 2021-2022 3-5 Year Tenure-Track Annual Review for Truong Nghiem

In compliance with university policies, it is my responsibility to conduct annual reviews of SICCS faculty and prepare written performance reviews documenting my findings.

This review is of Dr. Nghiem's service for AY 2021-2022. Dr. Truong Nghiem was evaluated with respect to criteria appropriate to their rank and career stage in the categories of Research, Teaching, and Service. The review was conducted with a consideration of their allocation effort to each categories and with reference to (i) the CEIAS Process Guidelines for Annual Evaluation, Promotion, and Tenure (2018) and (ii) the NAU Conditions of Faculty Service (2013).

This review addresses my evaluation of Dr. Nghiem's record of accomplishments in AY 2021-2022. It does so in the context of documentation of accomplishments compiled by Dr. Nghiem. This review is independent of the SICCS Faculty Status Committee's evaluation. However, it references information in the committee's evaluation.

Research: Dr. Nghiem's record demonstrates high productivity across ongoing funding, new proposals, and publications. Hihlights for AY 21-22 include a new NSF grant (~$200K, PI-level), ongoing participation in a large (~$1.4M) grant, several smaller SRP grants, and multiple publications in high-impact journals and conferences. I evaluate Dr. Nghiem's performance in this category as ***Highly Meritorious***. Dr. Nghiem should also be commended for his high level of interdisciplinary and collaborative research.

Teaching: I judge Dr. Nghiem's performance in this area as **Highly Meritorious**. His formal teaching, capstone team sponsorhip, and one-on-one graduate and undergraduate student mentorship are an asset to the department. I concur with SICCS FSC assessment on the quality of Dr. Truong's course preparation and encourage him to continue to improve his control systems courses.

Service: I rate Dr. Nghiem's work in Service as **Highly Meritorious**. He has participated in service activities to his field (NSF reviewer), to the University (UGC representative), and to the School (multiple search committees, graduate admissions committee, etc). I would like to particularly highlight Dr. Truong's service to the Unit – his extensive participation in Unit service opportunities are both noticed and greatly appreciated.

Summary: Dr. Nghiem has clearly earned an overall performance rating of **Highly Meritorious**. I thank Dr. Nghiem for his outstanding contributions to SICCS, CEIAS, and NAU. In the context of a tenure and promotion application, I am in strong agreement with the committee: Dr. Nghiem's track record to date strongly indicates that, if this trajectory continues, his application will be successful.

Retention Statement: I am very pleased to recommend that Dr. Nghiem be retained.