## FORM NO. NTT-1-a

# RECOMMENDATION INFORMATION FORM FOR

GENERAL NON-TENURE TRACK TEACHING, RESEARCH, and PROFESSIONAL PRACTICE FACULTY, and CLINCAL LAW FACULTY

Candidate's Name:	Ana Paula Centeno
Present Title:	Assistant Teaching Professor
Evaluated for Promo	tion to (check appropriate title below):
Teaching Titles:	
✓_Associate Teachi	ng Professor
Teaching Profess	or
Distinguished Te	aching Professor
Research Titles:	
Associate Resear	ch Professor
Research Profess	
Distinguished Re	search Professor
Professional Practice	Titles:
	sor of Professional Practice
Professor of Prof	
Distinguished Pro	ofessor of Professional Practice
Clinical Law Titles:	
Clinical Associat	
Clinical Professo	
Distinguished Cli	nical Professor Law
Effective Date of Pro	motion: 7/1/2020
College/Faculty:	School of Arts and Sciences
•	<u> </u>
Department:	SAS - Computer Science
	m is ordinarily completed by the candidate who wishes to be considered for non-tenure valent to the rank of Associate Professor and above. The evaluation may be initiated by

track promotion equivalent to the rank of Associate Professor and above. The evaluation may be initiated by a prospective candidate's department chair, dean, the appropriate chancellor, the Executive Vice President for Academic Affairs, or a personnel committee. All groups involved in the process must indicate their advisory judgments on the appropriate forms.

Entries should be listed in reverse chronological order, that is, the most recent, first.

This evaluation is initiated by: Matthew Stone, Chair, Computer Science Department

(If this evaluation is being conducted pursuant to the "rank review" (self-initiated) provision described in Section C of the Instructions, indicate that the evaluation is initiated by the candidate.)

- 1. Academic Degrees (institutions and dates):
  - 1. PhD, Rutgers University, Computer Science, 2019
  - 2. Master of Science, Computer Science, 2003
  - 3. Master of Science, Computer Science, 1999
  - 4. Bachelor of Science, Computer Science, 1997
- 2. Employment History. Include employment prior to Rutgers, Rutgers employment with dates, and appointments within Rutgers, e.g., memberships in organized research centers, collegiate fellowships or interdisciplinary programs. If candidate held a post doc appointment prior to employment at Rutgers, include the name(s) of the principal investigator(s) or advisor(s):
  - 1. 2015-ongoing: Assistant Teaching Professor
  - 2. 09/2014-05/2015: Part Time Lecturer
  - 3. 2004-2012: Teaching Assistant
  - 4. 05/2007-08/2007: Intern
  - 5. 2001-2003: Research Assistant
  - 6. 1997-1999: Research Assistant
  - 7. 1996-1997: Teaching Assistant
- 3. Budgetary distribution since last evaluation. Indicate AY or CY, **and** IDR (instruction and departmental research), AES (agriculture and experiment station), or other. List any joint appointments and indicate the percentage line split. AY, IDR

### **Teaching**

1. Using the format in the example below, list in reverse chronological order, the teaching assignments of the candidate for every semester since the last successful promotion, including the assignment for fall 2019. Please number all entries, starting with the number 1 in each subsection. If there is no formal teaching assignment for a semester, then indicate "none" and give the reason (chairperson of major committee, leave without pay, etc.). The teaching chart is to be used only for typical classroom teaching (including lecture courses, seminars, colloquia, etc.) in credit-bearing courses that involve formal and consistent evaluative processes, typically the Student Instructional Rating Form. Independent studies and other forms of student mentorship or advising, including dissertation supervision, are to be listed under items 3 to 6; do not list these on the teaching chart.

## **Course Information:**

<sup>&</sup>lt;sup>1</sup> "Rank review" refers to the circumstance where an evaluation is granted by request of a non-tenure track faculty member who has been at the same rank for six years and has not been evaluated for the past four years.

Candidate's Name: Ana Paula Centeno

Department: SAS - Computer Science

Date: January 2020

2019-2020

For each course, include year, semester, course title and number, number of credits, mode of instruction, main audience, responsibilities and enrollment.<sup>2</sup>

## Course Evaluation:

For each course for which summary student evaluation data are available, include the number of student evaluation responses received, and the instructor and departmental mean values for questions 9 and 10 on the University's Student Instructional Rating Form. If units use a different rating form, please indicate maximum rating value. If evaluations are not included for a specific course, please account for missing evaluations.

## Example:

	- COURSE INFORMATION -							-	COURSE	EVALU	ATION -	
										hing veness = 5)	Course (Max	
S/Yr	Course Title	Number	Cr	MOI	Aud	Resp	Enrl		Instructor	Dept Mean	Instructor	Dept Mean
Fa 19	Intro Computer Science	01:198:111:01	4	Lec	unm	Total	229	103	4.03	3.89	3.69	3.79
Fa 19	Intro Computer Science	01:198:111:50	4	Lec	unm	Total	191	107	3.98	3.89	3.39	3.79
Fa 19	Intro Computer Science	01:198:111:65	4	Lec	unm	Total	230	125	4.20	3.89	3.97	3.79
Fa 19	Indep Study Computer Science	01:198:294:01	1	Lec	unm	Total	20	11	4.91	3.89	4.55	3.79
Sp 19	Intro Computer Science	01:198:111:15	4	Lec	unm	Total	150	53	4.06	3.89	4.04	3.71
Sp 19	Data Structures	01:198:112:12	4	Lec	unm	Total	188	67	4.51	3.89	4.08	3.71
Sp 19	Indep Study Comp Sci: Great Ideas & Applications I	01:198:294:01	1	Lec	unm	Total	23	9	4.67	3.89	4.56	3.71
Fa 18	Intro Computer Science	01:198:111:01	4	Lec	unm	Total	258	87	4.17	3.87	4.14	3.81
Fa 18	Data Structures	01:198:112:10	4	Lec	unm	Total	184	47	4.45	3.87	4.13	3.81
Sp	Data Structures	01:198:112:01	4	Lec	unm	Total	177	62	4.37	4.00	4.13	3.97

18												
Sp 18	Data Structures	01:198:112:12	4	Lec	unm	Total	171	62	4.52	4.00	4.18	3.97
Sp 18	Data Structures	01:198:112:20	4	Lec	unm	Total	184	53	4.47	4.00	4.27	3.97
Fa 17	Intro Computer Science (Lecture)	01:198:111:01	4	Lec	unm	Total	229	103	4.37	3.96	4.30	3.91
Fa 17	Data Structures (Lecture)	01:198:112:15	4	Lec	unm	Total	127	37	4.32	3.96	4.32	3.91
Sp 17	Intro Computer Science (Lecture)	01:198:111:01	4	Lec	unm	Total	190	86	4.29	4.00	4.14	3.92
Sp 17	Data Structures (Lecture)	01:198:112:20	4	Lec	unm	Total	167	51	4.16	4.00	4.06	3.92
Fa 16	Intro Computer Science (Lecture)	01:198:111:35	4	Lec	unm	Total	197	104	4.10	4.03	3.95	3.96
Fa 16	Data Structures (Lecture)	01:198:112:10	4	Lec	unm	Total	127	46	4.51	4.03	4.28	3.96
Fa 16	Data Structures (Lecture)	01:198:112:15	4	Lec	unm	Total	137	41	4.33	4.03	4.08	3.96
Sp 16	Intro Computer Science (Lecture)	01:198:111:14	4	Lec	unm	Total	153	61	4.23	4.02	4.10	3.96
Sp 16	Data Structures (Lecture)	01:198:112:01	4	Lec	unm	Total	166	69	4.25	4.02	4.13	3.96
Sp 16	Data Structures (Lecture)	01:198:112:20	4	Lec	unm	Total	127	39	4.34	4.02	4.11	3.96
Fa 15	Intro Computer Science (Lecture)	01:198:111:35	4	Lec	unm	Total	169	73	3.63	3.87	3.58	3.76
Fa 15	Intro Computer Science (Lecture)	01:198:111:65	4	Lec	unm	Total	122	38	3.79	3.87	3.76	3.76
Fa 15	Data Structures (Lecture)	01:198:112:10	4	Lec	unm	Total	119	35	3.37	3.87	3.23	3.76

For items 2 through 14 include information from last successful evaluation only.

<sup>&</sup>lt;sup>2</sup> "Mode of instruction" (MOI) means <u>lec</u>ture, <u>lab</u>oratory, <u>rec</u>itation, <u>sem</u>inar, or other, as appropriate.

"Main audience" (Aud) means the group most likely to take the course (<u>grad</u>uate students, <u>u</u>ndergraduate <u>m</u>ajors, <u>u</u>ndergraduate <u>n</u>on-<u>m</u>ajors or other).

"Responsibilities" (Resp) describes the candidate's participation in the course, e.g.:

Provide a numerical reflection of participation, e.g., 100%, 50%, 33%, etc.

If it was one guest lecture, state specifically as "one guest lecture."

The candidate essentially had <u>total</u> responsibility for the course, i.e., for the design of the syllabus, the choice of text, the great majority of lectures or other form of class leadership, grading and the writing of examinations; and/or

the candidate had responsibilities beyond those described above, e.g., the administration of a large introductory lecture or laboratory course. Describe those responsibilities; and/or

the candidate had <u>shared</u> responsibility. If the candidate had <u>shared</u> responsibility, describe the nature of that responsibility or explain fraction of candidate's effort (e.g., taught two lecture sections for 0.5 semester; organized series of invited lectures; 50%); and/or

other. Describe the candidate's participation.

- 2. Special honors courses, interdisciplinary courses or collegiate mission courses taught. Also list international courses taught on campus or abroad.
  - 1. CS-LLC (Computer Science-Living and Learning Community) Douglass house seminar: Great Ideas in Computer Science
- 3. List by year, the undergraduate and graduate students whose independent studies, honors theses and research internships were supervised since the last successful promotion and explain the nature of the work supervised. Provide also the title of the project, if relevant. List each student once only and include the year(s) supervised with the most recent first. For item 3, include information since last successful evaluation only.
  - 2018: David Parsons, Created a server-less and developer friendly version of the Rutgers Schedule of Classes (SOC) API
  - 2. 2018: Joseph Boyle, Dynamic Recitation: student-focused, goal oriented, recitation management platform currently being used in Introduction to Computer Science by 1800 students per academic year at Rutgers.
- 4. List by year of completion, the graduate students whose Doctoral and Master's theses were supervised since the last successful evaluation. Also include those currently being supervised. List each student once only.
  - A. Doctoral theses supervised as primary advisor.
  - B. Membership on doctoral theses committees or other (specify)
  - 1. 2019: Jeffrey Ames, Visualization: development of a study to quantify the aid of visualization tools to CS1 and CS2 students in understanding data structures concepts. (Mentor)
  - C. Master's theses supervised as primary advisor.
  - D. Membership on Master's theses committees or other (specify).
- 5. Postdoctoral trainees (identify by name and years of training).
- 6. Academic advisement, including mentoring (describe role in departmental and collegiate student advisement programs, including international student advising, and approximate number of advises per year).

1. 2016: 2016-ongoing: Member of the Computer Science Academic Advising Team: this role includes 4 hours of academic advising to students per week. Approximately 280 students per academic year.

- 7. Curriculum development (be specific and indicate textbooks, anthologies or other edited collections, training guidelines, manuals, and software programs to enhance learning, newly created courses and/or programs, major revisions of existing courses and/or programs, etc.). For textbooks, anthologies, training guidelines, manuals, and software, indicate scope of dissemination, i.e., local, statewide, national or international.
  - 1. 2019-ongoing: Responsible for the modernization and standardization of the Introduction to Computer Science course, Summer 2019.
  - 2. 2017-ongoing: DynRec: Dynamic Recitation management platform.
- 8. Educational grants received and grant proposals under consideration. Include sponsor, title of grant, period of the award, amount awarded, and role (when other faculty members are involved, the role of the candidate who is reporting should be made clear).
- 9. Development of educational programs. List implementation.
  - 1. 2019-ongoing: Autolab tool usage for Introduction to Computer Science Instructors.
  - 2. 2019-ongoing: Tool installation videos for freshman students. Helps installing the tools necessary for the Introduction to Computer Science course.
  - 3. 2018-ongoing: Tool usage videos for freshman students on Introduction to Computer Science.
- 10. Instructional development. List activities aimed at enhancing your classroom teaching (e.g., your participation in workshops or programs offered at professional conferences or by the Center for Teaching Advancement and Assessment Research, etc.).
- 11. Program assessment/out-of-class evaluation activities. Provide explanation of participation in assessment of educational outcomes, such as end-of-program assessment, screening students for scholarships and other distinctions, etc.
- 12. Syllabi. Provide links to course syllabi (including course learning goals and assessment methods), or related course materials, if available.
  - 1. https://introcs.cs.rutgers.edu
- 13. Teaching awards/educational honors (include nominations, awards, invitations, and commendations).
- 14. Other.
  - 1. 2019: FIGS Faculty Mentor: mentoring peer instructor student on developing course material for FIGS seminar.
  - 2. 2018: ongoing: SAS Mentor
  - 3. 2016: ongoing: HackHers and HackRU judge, involves judging student's projects on Rutgers programming marathons.

## **Scholarship**

List of publications<sup>3</sup> (please provide all entries in reverse chronological order). **Include an explanation of the candidate's contribution to all jointly-authored works.** Please number all entries, starting with the number 1 in each subsection.

- 1. Title of dissertation, date and name of director.
  - 1. Optimizing Task Scheduling in Emergency Departments, October 2019, Richard P. Martin
- 2. Books (give title, press, date of publication, page numbers and list of authors as it appears in the publication). **Include an explanation of the candidate's contribution to jointly-authored works.** 
  - A. Published. Number all entries in Section 2A, starting with the number 1 in each subsection a, b, and c.
  - (a) Authored
  - (b) Edited
  - (c) Chapters in books
  - B. <u>Accepted or in Press</u>. Number all entries in Section 2B, starting with the number 1 in each subsection a, b, and c. (Be specific, as above and indicate title, press, expected date of publication, length).

- (a) Authored
- (b) Edited
- (c) Chapters in books
- C. <u>Works in progress and/or items not yet accepted</u>. Be specific, as above and indicate status (i.e. second review, submitted in preparation; indicate title, length, expected date of completion). Number all entries in Section 2C, starting with the number 1.
- 3. Journal articles (refereed). Give title, journal, date, page numbers and list of authors as it appears in the publication. Number all entries in Section 3, starting with the number 1 in each subsection A, B, and C. Include an explanation of the candidate's contribution to jointly-authored works.

#### A. Published

- B. <u>Accepted or in Press</u> . (Be specific, as above and indicate title, name of journal, expected date of publication, length).
- C. <u>Works in progress and/or items not yet accepted</u>. Be specific, as above and indicate status (i.e. second review, submitted, in preparation; indicate title, length, expected date of completion).
- 4. Journal articles (not refereed). Give title, journal, date, page numbers and list of authors as it appears in the publication. Number all entries in Section 4, starting with the number 1 in each subsection A, B, and C. **Include an explanation of the candidate's contribution to jointly-authored works.**

### A. Published

<sup>&</sup>lt;sup>4</sup> In cases in which candidates have publications in a foreign language, reviews or comments on these publications from appropriate referees should be included in the packet. For materials distributed by foreign publishers, or awards from other nations, a description of the press or award and its reputation should be included in the narrative.

- B. <u>Accepted or in Press</u> (Be specific, as above and indicate title, name of journal, expected date of publication, length).
- C. <u>Works in progress and/or items not yet accepted</u>. Be specific, as above and indicate status (i.e. second review, submitted, in preparation; indicate title, length, expected date of completion).
- 5. Electronic publications (refereed). If not listed under #3 above, give title of publication, journal or other applicable name, network citation, e.g., uniform resource locator (URL), date, approximate number of pages, and list of authors. Indicate if the publication is permanently archived. **Include an explanation of the candidate's contribution to jointly-authored works.**
- 6. Electronic publications (not refereed). If not listed under #4 above, give title of publication, journal or other applicable name, network citation, e.g., uniform resource locator (URL), date, approximate number of pages, and list of authors. Indicate if the publication is permanently archived. **Include an explanation of the candidate's contribution to jointly-authored works.**
- 7. Published conference proceedings (Be specific, as above and indicate title, volume, date of publication, page numbers). Number all entries in Section 7, starting with the number 1 in each subsection A, B, and C. **Include an explanation of the candidate's contribution to jointly-authored works.** 
  - A. Published
  - B. <u>Accepted or in Press</u> (Be specific, as above and indicate title, volume, date of publication, length).
  - C. <u>Works in progress and/or items not yet accepted</u>. Be specific, as above and indicate status (i.e. second review, submitted, in preparation; indicate title, length, expected date of completion).
- 8. Notes, book reviews, abstracts (indicate which it is and be specific, as above and indicate title, press, date of publication, page numbers). Number all entries in Section 8, starting with the number 1 in each subsection A, B, and C. Include an explanation of the candidate's contribution to jointly-authored works.
  - A. Published
  - B. Accepted or in Press (Be specific, as above and indicate title, press, expected date of publication, length).
  - C. <u>Works in progress and/or items not yet accepted</u>. Be specific, as above and indicate status (i.e. submitted, in preparation; indicate length, title, expected date of completion).
- 9. Conference presentations, lectures, demonstrations. Include location, city and state and/or city and country. Number all entries in Section 9, starting with the number 1 in each subsection A, B, and C.
  - A. Keynote or plenary addresses (Indicate which it is).
  - B. Other invited addresses (as seminar, symposia, workshop speaker, panelist, discussant, etc. List in reverse chronological order).
  - C. Other presentations, lectures, demonstrations (include presentations at professional meetings, workshops, symposia. List in reverse chronological order).

#### Papers, Abstracts, and Lectures

1. Ana Paula Publications Centeno, R. Martin, and R. Sweeney. "REDSim: A Spatial Agent-Based Simulation For Studying Emergency Departments." In Proceedings of the Winter Simulation Conference, Washington DC, USA, 2013.

2. Wei Zheng, Ana P. Centeno, Frederic Chong, and Ricardo Bianchini. "LogStore: toward energy-proportional storage servers." In Proceedings of International Symposium on Low Power Electronics and Design (ISLPED), Redondo Beach, CA, USA, 2012.

- 3. T. Heath, A. P. Centeno, P. George, L. Ramos, Y. Jaluria, and R. Bianchini. "Mercury and Freon: Temperature Emulation and Management in Server Systems". In Proceedings of the International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS), San Jose, CA, USA, October 2006.
- 4. A. P. Centeno and C. Geyer. Penelope: A model of a hierarchical scheduler for PLoSys (Parallel Logic System). In Proceedings of Brazilian Symposium of computers architecture and high performance processing, pages 39-48, Buzios, RJ, Brazil, October 1998. Rio de Janeiro: COPPE/UFRJ, 1998.
- 5. A. P. Centeno. A model of a hierarchical scheduler for the PLoSys system. In Proceedings of III Academic Week of CPGCC, pages 65-68, Porto Alegre, RS, Brazil, August 1998. CPGCC of UFRGS, 1998.
- 6. A. P. Centeno and C. Geyer. Scheduling of parallel logic programming systems. Porto Alegre, RS, Brazil: CPGCC da UFRGS, 1997. (TI-686).
- 7. A. P. Centeno and J. Barbosa. Implementation and evaluation of HetNOS heterogeneous operating system in UCPel. In Proceedings of V Congress of Scientific Initiation, Pelotas, RS, Brazil, November 1996. Pelotas:FURG/UFPel/UCPel.
- 8. A. P. Centeno and J. Barbosa. Implementation and evaluation of a heterogeneous operating system in UCPel. In Proceedings of VII Seminar of Scientific Initiation, Porto Alegre, RS, Brazil, September 1996. Porto Alegre: UFRGS/RS.
- A. P. Centeno and C. Avila. Studies to obtain photo-realistics images by computers. In Proceedings of IV Congress of Scientific Initiation, Rio Grande, RS, Brazil, November 1995. Rio Grande: FURG/UFPel/UCPel.
- 10. List and explain other major accomplishments that are not noted elsewhere.
- 11. Fellowships (give name of the fellowship, period of the award and amount awarded).
- 12. Grants received
  - (a) External Include sponsor, title of grant, full period of the award, amount awarded, and role (principal investigator, co-principal investigator or other). If other than principal investigator, indicate percentage effort of the candidate and the identity of the principal investigator or co-principal investigator(s). List in reverse chronological order.

Date	Title	Agency	Role (PI, Co-PI, etc.)	Amount (total)
inv	estigator, co-p	rincipal investigator	or other). If other than prin	amount awarded, and role (principal cipal investigator, indicate percentage or or co-principal investigator(s).
Date	Title	Agency	Role (PI, Co-PI, etc.)	Amount (total)

(c) International Studies and Programs Grants - Include sponsor, title of grant, period of the award, amount awarded, and role (principal investigator, co-principal investigator or other). If other than principal investigator, indicate percentage effort of the candidate and the identity of the principal investigator or co-principal investigator(s).

Date	Title	Agency	Role (PI, Co-PI, etc.)	Amount (total)
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- 13. Grants pending/currently under review (be specific as above).
  - (a) External Include sponsor, title of grant, full period of the award, amount awarded, and role (principal investigator, co-principal investigator or other). If other than principal investigator, indicate percentage effort of the candidate and the identity of the principal investigator or co-principal investigator(s). List in reverse chronological order.

			I		
Date	Title	Agency	Role (PI. Co-PI. etc.)	Amount (total)	

(b) Internal - Include sponsor, title of grant, period of the award, amount awarded, and role (principal investigator, co-principal investigator or other). If other than principal investigator, indicate percentage effort of the candidate and the identity of the principal investigator or co-principal investigator(s).

Date	Title	Agency	Role (PI, Co-PI, etc.)	Amount (total)
	1111	1 -8-1-7	11010 (11, 00 11, 000)	11110 0111 (00 0011)

(c) International Studies and Programs Grants - Include sponsor, title of grant, period of the award, amount awarded, and role (principal investigator, co-principal investigator or other). If other than principal investigator, indicate percentage effort of the candidate and the identity of the principal investigator or co-principal investigator(s).

Date Title Age	Role (PI, Co-PI, etc.)	Amount (total)
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- 14. Contracts (not book contracts) Indicate (i) period of the contract, (ii) amount awarded.
- 15. Prizes and awards.

#### Service

- 1. Contributions to the advancement of the academic profession. (For example, include Review responsibilities such as Editorships (dates), Editorial Board memberships (dates), ad hoc reviewer for journals (list journals), ad hoc reviewer for grant agencies (local, regional, national, international), appointed membership on study section, agency advisory boards; Activities on behalf of professional organizations such as chair of committees, programming, appointed or elected leadership roles in professional societies, directorships, workshops and symposia organizer, etc.).
- 2. Contributions to the effective operation of the University, including contributions to the department, school or college. Include lists of committee memberships, positions held, time served, and accomplishments.
  - 1. 2019-ongoing: Member of Rutgers Women in Computer Science Initiative partnership between DIMACS, the Department of Computer Science, and the Douglass Residental Collage aimed at increasing the percentage of undergraduate women majoring and minoring in Computer Science at Rutgers and elsewhere.

3. List administrative positions held (e.g. Department Chair, Associate Dean, Area Dean, Undergraduate Campus Dean, Graduate Program Director, major committee or taskforce head, etc.). Include time served and list accomplishments. Indicate time served and provide brief explanation of your contribution to the advancement of the school, unit, department, program, etc.

- 4. Faculty mentoring (list by year, the faculty members you mentored and describe the mentoring provided).
- 5. Contributions to society at large (list significant contributions to local, national, or international communities, service to professional societies, etc. that have not been listed elsewhere).
- 6. Prizes and awards.