

FACULTY VITAE

1. Name: Patrick N. Currier

2. Education

<u>Degree</u>	<u>Discipline</u>	<u>Institution</u>	<u>Year</u>
B.S.	Mechanical Engineering	Tennessee Tech	2005
M.S.	Mechanical Engineering	Virginia Tech	2008
Ph.D.	Mechanical Engineering	Virginia Tech	2011

3. Academic experience

Institution	Rank	Title	Dates Held	FT/PT
ERAU	Assistant Professor		2011-present	FT

4. Non-academic experience:

Organization	Title	Duties	Dates	FT/PT
Denso Manufacturing	Intern	Production Engineering	2003-2004	FT

5. Certifications or professional registrations: None

6. Membership in professional organizations

- a. ASME – Member
- b. IEEE – Member
- c. SAE – Member
- d. AUVSI – Member

7. Honors and awards

- a. Best Paper Award – 17th International Conference of the ISTVS, 2011

8. Service activities

- a. ME Department Curriculum Committee
- b. Advisor: Robotics Association at Embry-Riddle
- c. Judge: FIRST Technical Challenge
- d. Design Judge: Baja SAE
- e. Office of Naval Research SeaPerch Competition

9. Publications and presentations from past five years

- a. J. Tabaracci and P. Currier. A Blueprint for a Fixed-wing Autopilot on an Android Smartphone. *Proceedings of IEEE-SE*. April, 2013.
- b. R. Finta and P. Currier. Kalman filter for Improved PO2 Management in Closed Circuit Rebreathers. *Proceedings of IEEE-SE*. April, 2013.
- c. P. Currier and A. Wicks. A Novel Method for Prediction of Mobile Robot Maneuvering Spaces. *Journal of Terramechanics*. (Accepted for Publication)
- d. C. Breingan and P. Currier. Development of a Rockband Robot Using Vision Based Note Detection. *Proceedings of IEEE-SE*. March, 2012.
- e. G. Gamble, C. Hockley, A. Yatsko, P. Currier. Issues Facing the Development of a Monocopter Control System. *Proceedings of IEEE-SE*. March, 2012.
- f. P. Currier, A. Wicks. A Novel Method for Prediction of Mobile Robot Maneuvering Spaces. In *Proceedings of ISTVS 2011*. September, 2011.
- g. P. Currier, J. Hurdus, et al. The VictorTango Architecture for Autonomous Navigation in the DARPA Urban Challenge. in *Experience from the DARPA Urban Challenge*. C. Rouff (ed.) Springer, 2011.
- h. P. Reynolds, P. Currier, et al. Development of the Ground Unmanned Support Surrogate. In *Proceedings of AUVSI North America 2011*, August 2011.
- i. P. Currier, R. Goff, and J. Terpenney. A Proposed Learner-Centered Mechatronics Engineering Instructional Program. In *Proceedings of the 2010 ASEE Southeastern Section*, April 2010.
- j. P. Currier. Technical Enablers for Team VictorTango in the DARPA Urban Challenge. Invited presentation for Draper Laboratory 'Beyond the Urban Challenge' Symposium., June 2008.
- k. J. Hurdus, P. Currier, et al. The VictorTango Architecture for Autonomous Navigation in the DARPA Urban Challenge. *AIAA Journal of Aerospace Computing, Information, and Communication*, Vol 5:506–544, December 2008.
- l. A. Bacha, P. Currier, et al. Odin: Team VictorTango's Entry in the DARPA Urban Challenge. *Journal of Field Robotics*, Vol 25(8):467–492, 2008.

10. Recent professional development activities.

- a. IEEE SoutheastCon, 2012-2013
- b. 17th International ISTVS Conference, 2011
- c. AUVSI Unmanned Systems North America, 2011-2012