

CURRICULUM VITAE
VENKATA NAGA PRADEEP AMBATI, PhD

I. PROFESSIONAL AFFILIATIONS AND CONTACT INFORMATION

A. Present University and Department:

California State University, San Bernardino
Department of Kinesiology

B. Office Address:

Department of Kinesiology
HP 201
College of Natural Sciences
5500 University Parkway
San Bernardino CA 92407
909-537-3579
vambati@csusb.edu

II. EDUCATION

- A. Doctor of Philosophy (2014)**
Interdisciplinary Health Sciences PhD Program
University of Texas at El Paso
- B. Master of Science in Biomedical Engineering (2009)**
University of South Florida, Department of Chemical and Biomedical Engineering
- C. Bachelor of Engineering (2007)**
Department of Biomedical Engineering
Osmania University, India

III. PROFESSIONAL EXPERIENCE

- A. August 2020 – present**
Assistant Professor
Department of Kinesiology
College of Natural Sciences
California State University, San Bernardino
- B. July 2016-August 2020**
Assistant Professor
Department of Kinesiology
Southern Illinois University Carbondale

- C. October 2014-June 2016
Post-doc
Center for Research in Human Movement Variability
Biomechanics Research Building, College of Education
University of Nebraska at Omaha
- D. January 2010-August 2014
Graduate Research Assistant
Stanley E Fulton Biomechanics and Motor Behavior Laboratory
College of Health Sciences
University of Texas at El Paso
- E. December 2007-December 2010
Graduate Research Assistant (Engineering technician)
Human Performance and Motor Behavior Laboratories
James A Haley Veterans' Medical Center, Tampa

IV. RESEARCH AND CREATIVE ACTIVITY

A. Interests and Specialties:

Motor control and motor learning

Motor development

Biomechanics

Autism Spectrum Disorder

Visuomotor activity

B. Grants

1. Mini Grant (Academic Affairs) (Budget: \$6,100) - This grant was awarded to support the research work in the current academic year (2022-2023).
Received: May 27, 2022
2. Mini Grant (Academic Affairs, CSUSB) (Budget: \$6,100) - This grant was awarded to support the research work in the academic year (2021-2022).
Received: May 24, 2021
3. LA (Learning Assistant) Course proposal (Fall 2022) – Applications to recruit Learning Assistants to work with us in KINE courses. Received approvals for KINE 4800 in Fall 2022

4. LA (Learning Assistant) Course proposal (Spring 2023) – Applications to recruit Learning Assistants to work with us in KINE courses. Received approvals for KINE 4800 in Spring 2023.
5. NSF Grant (Budget: \$999,459) (not funded)
Submitted: Spring 2018
Title: CICI: SSC: E2SECURE: A Resilient security architecture to protect end-to-end scientific workflow of research cyber infra-structure
Sub-title: Investigation of visual attention in children diagnosed with autism spectrum disorder using saliency approach
6. SIU Graduate Research Assistant grant (25%) = \$1600 (Fall 2016). (funded)
7. SIU Undergraduate Research Assistant grant (25%) = \$3,200 (Fall 2016 – Spring 2017). (funded)
8. Autism Speaks pre-proposal
Submitted: March 2016
Title: The purpose of this study is to show that oculomotor deficits play a causal role in postural hyporeactivity to dynamic visual stimulus in children with autism spectrum disorder
Role: Principal Investigator
Total requested funding: \$100,000 (not funded)
9. NASA HERO Omnibus Full proposal
Submitted: November 2015
Project title: This research study proposed a series of experiments to shed light on the effect of vestibular stimulation on locomotor adaptation. In addition other tests were included to examine the combined effect of the visual and the vestibular sensory systems on locomotor adaptation
Role: Co-Principal Investigator
Total requested funding: \$100,000 (not funded)
10. Travel grant from Biomechanics Research Building at University of Nebraska Omaha to attend American Society of Biomechanics meeting (2015) for \$500 (funded)
11. NASA EPSCOR pre-proposal
Project title: The effect of vestibular stimulation on gaze stabilization in an integrated virtual reality environment.
Submitted: December 2014 (Not Funded)
Role: Co-Principal Investigator
Total requested funding: \$750,000

C. Articles published in peer reviewed journals

1. Rand, T., **Ambati, V.N. P.**, & Mukherjee, M. (2018). Persistence in postural dynamics is dependent on constraints of vision, postural orientation and the temporal structure of support surface translations. *Experimental Brain Research*.
2. Chein, J.C., **Ambati, V.N. P.**, Huang, C., & Mukherjee, M. (2017). Tactile stimuli effect long range correlations of stride interval and stride length differently during walking. *Experimental Brain Research*.
3. **Ambati, V.N. P.**, Saucedo, F., Murray, N., Powell, D., & Reed-Jones, R. (2016). Constraining eye movement in individuals with Parkinson's disease during walking turns. *Experimental Brain Research*.
4. **Ambati, V. N. P.**, Murray, N., Saucedo, F., Powell, D., & Reed-Jones, R. (2013). Constraining eye movement when redirecting walking trajectories alters turning control in healthy young adults. *Experimental Brain Research*. 226(4), 549-556. DOI 10.1007/s00221-013-3466-8
5. Murray, N., **Ambati, V. N. P.**, Salvatore, A.P., Reed-Jones, R. (*In Press*). Assessment of Oculomotor Control and Balance in Post Concussion: A preliminary study for a novel approach to concussion management. *Brain Injury*. TBIN-2012-0312
6. Murray N., Ponce De Leon M., **Ambati V.N. P.**, Saucedo F., Kennedy E., **Reed-Jones R.** (2014) Simulated visual field loss does not alter turning coordination in healthy young adults. *Journal of Motor Behavior*, In review 35-13-125-RA.
7. **Ambati, V.N.P.**, Escalante, G., Saucedo, F., Garcia-Guevara, I., & Reed-Jones, R.,(2022). Initiation of Body Segment Reorientation in Steering is not Altered While Dual Tasking. *J Rehab Pract Res*, 3(1):134. <https://doi.org/10.33790/jrpr1100134>
8. **Ambati, V.N.P.**, Reimer, J., Escalante, G., & Saucedo, F., (2022). Atypical Gaze Behavior in Children with High Functioning Autism During an Active Balance Task. *Ann Appl Sport Sci*.
9. Saucedo, F., Chaves, E.A., Vanderhoof, H.R., **Pradeep Ambati, V.N.**, Eggleston, J.D.,(2022): Effects of controlled whole-body vibration training on balance and fall outcomes among healthy older adults: a 6-week pilot study. *The Journal of Aging and Lifestyle (JARLife)*. <http://dx.doi.org/10.14283/jarlife.2022.6>
10. Escalante, G.; Darrow, D.; **Ambati, V.N.P.**; Gwartney, D.L.; Collins, R. Dead Bodybuilders Speaking from the Heart: An Analysis of Autopsy Reports of Bodybuilders That Died Prematurely. *J. Funct. Morphol. Kinesiol.* **2022**, 7, 105. <https://doi.org/10.3390/jfmk7040105>

D. Manuscripts in Preparation

1. **Ambati, V.N.P.**, Ruth Anne Rehfeldt. Assessment of ocular motor control in children with high functioning autism during an active balance task.
2. Palmer, S., **Ambati, V.N.P.** Play based exercise intervention to improve motor skill performance in children with autism spectrum disorder.
3. Rich, K., Palmer, S., Lee, T., **Ambati, V.N.P.** A closer look at performance of children with autism on the embedded figures test.

V. TEACHING EXPERIENCE

A. Teaching Interests and Specialties:

California State University, San Bernardino
KINE 3200 Principles of Human Movement
KINE 3500 Motor Development Across Lifespan
KINE 4100 Motor Learning and Control
KINE 4800 Biomechanics

Southern Illinois University Carbondale
KIN 511 Biomechanics of Human Movement
KIN 525 Motor Learning
KIN 313 Motor Behavior
KIN 300 Musculoskeletal Anatomy

University of Nebraska Omaha
PE 4630 Biomechanics

University of Texas El Paso
KIN 3331 Anatomical Kinesiology
CHSC 6380 Measurement Techniques-Biomechanics (Co-lecturer)

B. Honors and awards

Outstanding teaching award (tenure track) – Spring 2018
College of Education and Human Sciences, Southern Illinois University
Carbondale

C. Students mentored at SIU

Graduate students (Masters)
Stephanie Palmer
Sean Gloss

Summer Jones

Undergraduate students

Kara Rich – Recipient of REACH grant for Fall 2019-Spring 2020

Tien Jung Lee

Cole Mueller

Ashley Robinson

Jordan Ries – Recipient of REACH grant for Fall 2016-Spring 2017

Journal club – Fall 2018-present

Weekly meeting with graduate and undergraduate students to discuss scientific literature assigned for reading.

VI. PROFESSIONAL SERVICE

A. Membership in Professional Associations:

1. NASPSPA (North American Society for the psychology of sport and physical activity)(2018-present)
2. Society for Neuroscience (2015-2017)
3. Non-linear analysis workshop Biomechanics Research Building UNO (8/2014)
4. Journal club at the Biomechanics Research Building in UNO(2014-15)
5. Vision Sciences Society (2013-2015)
6. American College of Sports Medicine (2012)
7. Canadian Society of Biomechanics (2012-present)
8. American Society for Biomechanics (2013-present)

B. Reviewer for Journals:

1. Annals of Biomedical Engineering
2. International Journal of Exercise Science
3. Journal of Applied Biomechanics
4. Gait and Posture

C. Service to University

1. SIU representative to India for student recruitment on behalf of Center for International Education at SIU, December 2018
2. Member of Junior Faculty Development Network at SIU, Fall 2016 – present
3. Search Committee – Executive Director for Faculty Development (Spring 2022)
4. Instructional Quality Committee (Spring 2022 – present)

D. Service to College

1. Chair of College Advisory Committee, COEHS, SIU, Spring 2019-present

2. Member of College Advisory Committee, COEHS, SIU, Fall 2018

E. Service to Department

1. Advisor for Kinesiology Student Association
2. Part-time lecturer recruitment committee
3. Course lead - Review syllabi for KINE 3200 and KINE 2200 courses taught by all faculty members including Assistant Professors and part-time lecturers. Assist part-time lecturers by providing comments and any other type of assistance
4. Graduate committee for admissions, Dept. of Kinesiology, SIU, 2017-present

VII. OTHER RESEARCH AND CREATIVE ACTIVITY

A. Papers and Presentations at Professional Meetings:

Abstracts in refereed journals:

1. **Ambati V.N.P.**, Rand T., Fujan-Hansen J., Fayad P., Mukherjee M. (2016) Split belt walking increases Neurovascular Response during gait coordination task in stroke. Proceeding for the Society for Neuroscience, San Diego, November 2016
2. **Ambati V.N.P.**, Rand T., Fujan-Hansen J., Fayad P., Mukherjee M. (2015) Cortical responses evoked by noisy support surface perturbations during normal standing after stroke. Proceeding for the Congress of NeuroRehabilitation and Neural Repair, Amsterdam, Netherlands: May, 2015
3. **Ambati V.N.P.**, Rand T., Nielsen J., Mukherjee M. (2015) Long range correlations of center of pressure are stronger for AP perturbations than ML perturbations in healthy young adults. Proceeding for the American Society of Biomechanics, Columbus, OH: July, 2015
4. Lueders K., Eikema D.J., **Ambati V.N.P.**, Stergiou N., Bloomberg J., Mukherjee M. (2015) Reduction in structural and frequency coupling between posture and surface motion are facilitated by plantar tactile stimulation. Proceeding for the American Society of Biomechanics, Columbus, OH: July, 2015
5. **V.N. Pradeep Ambati**, Marlina Ponce de Leon, Fabricio Saucedo, Douglas Powell, Rebecca Reed-Jones (2013). Constraining eye movements when redirecting walking trajectories in people with Parkinson's Disease. Journal of Vision, In review 1170.
6. **V.N. Pradeep Ambati**, Nicholas G. Murray, Fabricio Saucedo, Douglas Powell, Rebecca Reed-Jones (2012). Head and Trunk Coordination in Turning

between Young and Old Adults. *Medicine and Science in Sports and Exercise*, 44 (5S), 546.

7. Nicholas G. Murray, Marlina Ponce de Leon, **V.N. Pradeep Ambati**, Fabricio Saucedo, Evan Kennedy, Rebecca J. Reed-Jones (2013). Acute Disturbances of Vision during Walking and Turning. *Journal of Vision*, In review 1283.
8. Nicholas G. Murray, **V.N. Pradeep Ambati**, Fabricio Saucedo, Monica M. Contreras, Anthony P. Salvatore, Rebecca J. Reed-Jones (2012). Assessment Of Oculomotor Control And Balance In Concussed And Non-concussed Individuals. *Medicine and Science in Sports and Exercise*, 44 (5S), 545
9. Sandor Dorgo, Rebecca J. Reed-Jones, Nicholas G. Murray, **V.N. Pradeep Ambati**. (2013) Short-Term Strength Adaptations in Young Adults Elicited by Minimal and Overload Resistance Training Intensities. *Journal of Strength and Conditioning Research*.
10. Sandor Dorgo, Rebecca J. Reed-Jones, Nicholas G. Murray, **V.N. Pradeep Ambati**. (In Review) Short-term Strength Adaptations in Trained and Untrained Young Adults Elicited by Minimal and Overload Resistance Training Intensities. *Medicine and Science in Sports and Exercise*

Abstracts in refereed conference proceedings:

1. **Ambati, V.**, (2022). Atypical Gaze in Children with Autism Spectrum Disorder During an Active Balance Task. NASPSPA (North American Society for the Psychology of Sport and Physical Activity) Conference May, 2022 , Hawaii (see page S11 in conference proceedings for abstracts) – poster
2. **Ambati, V.**, Reimer, J. (2022). Gaze Behavior During Embedded Figures Test in Children Diagnosed with High Functioning Autism Spectrum Disorder. NASPSPA (North American Society for the Psychology of Sport and Physical Activity) Conference May, 2022, Hawaii (see page S11 in conference proceedings for abstracts) – poster
3. **Ambati, V.**, Echols, J., Andraos, A., Torres, M., Ornelas, D., Khartabil, A., Darrow, D., Lua, G., Mejia, R., Escalante, G. (2022). The effects of foot wear on joint kinematics and muscle electromyographical activity during the back squat: a case study. International Society of Sports Nutrition 19th Annual Conference and Expo, Ft. Lauderdale FL, June 2022 – Poster presentation
4. Ramirez, A., Alvares, T., Garcia, I., & **Ambati, V.**, (2022). Gaze Behavior during embedded figures test in children diagnosed with high functioning

autism spectrum disorder. Undergraduate Summer Research Program Conference, CSUSB, August 11, 2022 – Oral Presentation

5. Ramirez, A., Alvares, T., Garcia, I., & **Ambati, V.** Gaze Behavior during embedded figures test in children diagnosed with high functioning autism spectrum disorder. 2022 Southern California Conference for Undergraduate Research (SCCUR), Pepperdine University, November 19th, 2022 – Oral Presentation
6. **Ambati V.N.P.**, Ruth Anne Rehfeldt. (2019) Assessment of ocular motor control in children with high functioning autism during an active balance task. Proceeding for North American society for the psychology of sport and physical activity (NASPSPA), Baltimore, June 2019
7. Mukherjee, M, Rand T.J., Fujan-Hansen J., **Ambati, V.N.**, Fayad, P. Virtual Reality effects the Learning of a Gait Coordination Task after Stroke. Submitted for presentation at the 10th World Stroke Congress, Hyderabad, India, October 26-29, 2016.
8. **Ambati V.N.P.**, Reed-Jones R.J., Salvatore A. (2014) Examining the role of attention in steering using a dual task paradigm. Proceeding for the World Congress of Biomechanics, Boston, MA: July, 2014
9. **V.N. Pradeep Ambati**, Marlina Ponce De Leon, Fabricio Saucedo, Douglas Powell, Rebecca Reed-Jones (2013). Constraining Eye Movements When Redirecting Walking Trajectories in People with Parkinson’s Disease. Proceedings from the 2013 meeting of the Vision Sciences Society, Naples, Florida, USA: May, 2013
10. **V.N. Pradeep Ambati**, Nicholas G. Murray, Douglas Powell, Rebecca Reed-Jones (2013). Comparison of Methods to Determine Rotation Onset of Upper Body Segments When Walking and Turning. Proceedings from the 17th biannual meeting of the Canadian Society for Biomechanics, Omaha, Nebraska, USA: September, 2013.
11. **V.N. Pradeep Ambati**, Nicholas G. Murray, Fabricio Saucedo, Douglas Powell, Rebecca Reed-Jones (2012). Constraining Eye Movements When Redirecting Walking Trajectories in Healthy Young Adults. Proceedings from the 17th biannual meeting of the Canadian Society for Biomechanics, Vancouver, British Columbia, Canada: June, 2012.
12. **V.N. Pradeep Ambati**, Nicholas G. Murray, Fabricio Saucedo, Douglas Powell, Rebecca Reed-Jones (2012). Head and Trunk Coordination in Turning between Young and Old Adults. Medicine and Science in Sports and Exercise. Volume 44:5, Supplement

13. Nicholas G. Murray, **V.N. Pradeep Ambati**, Fabricio Saucedo, Monica M. Contreras, Anthony P. Salvatore, Rebecca J. Reed-Jones (2012). Assessment Of Oculomotor Control And Balance In Post Concussion. Proceedings from the 17th biannual meeting of the Canadian Society for Biomechanics, Vancouver, British Columbia, Canada: June, 2012.
14. Reed-Jones R.J., Salvatore A., **Ambati V.N.P**, Bene E.R. (2011) Balance and gaze control in concussion management. Annual Meeting of the Society for Neuroscience, Washington D.C.,USA: November, 2011. 587.17/KK19

B. Invited Presentations and Job Interviews:

1. **Ambati, V. N. P.** (2016). Early gross motor and gaze behavior in infants at risk for autism: Potential for early diagnosis. Education and Human Service Talks, Carbondale, IL
2. **Ambati, V. N. P.** (2016). Using non-linear analysis to elucidate the role of vision in posture in healthy and clinical groups. Exercise and Sports Science, College of Health Studies, University of Memphis, TN
3. **Ambati, V. N. P.** (2016). Skeletal System. Department of Health and Exercise Science, Truman State University, MO
4. **Ambati, V. N. P.** (2015). Examining the role of attention in steering using a dual task paradigm. Presented at the Center for Research in Human Movement Variability, Biomechanics Seminar Series, University of Nebraska at Omaha.
5. **Ambati, V. N. P.** (2012). Constraining eye movements when redirecting walking trajectories in people with Parkinson's Disease. Presentation for Victoria University/University of Texas at El Paso Global engagement and learning program, Department of Kinesiology, College of Health Sciences, University of Texas at El Paso.
6. Interviewed for Biomedical Engineer position (2010). Biomedical Physiology and Kinesiology, Simon Fraser University, British Columbia, Canada.