2018 Neural Computation and Engineering Connection

Thursday, January 18, 2017
CSNE - Russell Hall Suite 204, 1414 NE 42nd St.

11:15am-12:30pm  Poster session and lunch (provided)

12:30-12:40pm  Welcome: Adrienne Fairhall, Tom Daniel, Eric Shea-Brown

12:40-1:30pm  Keynote lecture: “Engineering Haptic Illusions”
Allison Okamura, Stanford University

1:30-1:50pm  Break

1:50-2:15pm  1-slide introductions by new UWIN and Computational Neuroscience graduate and postdoctoral fellows:
Tom Libby, UWIN postdoctoral fellow, Burden and Daniel labs
Raymond Sanchez, UWIN graduate fellow, de la Iglesia lab
Momona Yamagami, UWIN graduate fellow, Steele and Burden labs
Mohammad F. Tariq, UWIN graduate fellow, Gire and Perkel labs
Soshi Samejima, UWIN graduate fellow, Mortiz and Saigal labs
Ezgi Yucel, UWIN graduate fellow, Fine and Rokem labs
Aaron D. Garcia, UWIN graduate fellow, Buffalo and B. Brunton labs
Iris Shi, Comp Neuro graduate fellow, Shea-Brown and Buice labs
Patrick Rice, Comp Neuro graduate fellow, Stocco lab

2:15-2:30pm  "Sparse sensing by arrays of wing mechanosensors for insect flight control"
Thomas Mohren, UWIN graduate fellow, S. Brunton and Daniel labs

2:30-2:45pm  "Synaptic specialization and convergence of visual channels in the retina"
Phil Mardoum, UWIN graduate fellow, Rieke and Wong labs

2:45-3:05pm  Break
3:05-3:20pm  "Visual learning and processing in the honeybee, Apis mellifera"
Claire Rusch, UWIN graduate fellow, Riffell lab

3:20-3:35pm  "Engineering direct cortical stimulation in humans"
David Caldwell, UWIN/BDGN graduate fellow, Rao and Ojemann labs

3:35-3:50pm  "Simulating Axon Health’s Impacts in the Setting of Cochlear Implants"
Jesse Resnick, Comp Neuro graduate fellow, Rubinstein lab

3:50-4:05pm  "Rod-cone flicker cancellation: retinal processing and perception in intermediate light"
Adree Songco-Aguas, Comp Neuro undergraduate fellow, Rieke lab

4:05-4:20pm  "Spatiochromatic integration by V1 double opponent neurons"
Abhishek De, Comp Neuro graduate fellow, Horwitz lab

4:20-5:00pm  Travel to Health Sciences Building (HSB) D-209 for the Inauguration of the new UW Computational Neuroscience Center (UW-CNC)

5:00-6:15pm  A brief introduction about the ambitions of the CNC and the opportunities in the field, from its faculty and directors
Short talks about this unique moment in computational neuroscience from thought leaders in the field at Google, Columbia, the Allen Institute for Brain Science, and UW

6:30-7:30pm  Reception in the inaugural CNC space (in HSB G-207)
2018 Neural Computation and Engineering Connection

Friday, January 19, 2017
UW Husky Union Building (HUB) Room 250
Early evening reception in HUB 145

8:30-9:30am  Neuroethics panel discussion and breakfast (provided)
Chair, Adrienne Fairhall
Participants include Tom Daniel, David Perkel, Beth Buffalo, Eric Shea-Brown

9:30-9:45am  Break

9:45-9:50am  Welcome and community updates
Adrienne Fairhall, Tom Daniel, Eric Shea-Brown

Session I
Chair: Beth Buffalo

9:50-10:20am  “Behavioral Implementation of Mnemonic Processing”
Sheri Mizumori, UW Psychology

10:20-10:50am  “Optogenetic stimulation leads to connectivity changes across sensorimotor cortex in non-human primates”
Azadeh Yazdan, UW Bioengineering & Electrical Engineering

10:50-11:10am  Break

11:10am-12:00pm  Keynote lecture: “Emergence of dynamically reconfigurable hippocampal responses by learning to perform probabilistic spatial reasoning”
Ila Fiete, UT Austin

12:00-1:00pm  Lunch (provided)
Session II
Chair: Kat Steele

1:00-1:50pm Keynote lecture & Robotics Colloquium:
“Robotic-assisted movement training after stroke: Why does it work and how can it be made to work better?”
David Reinkensmeyer, UC Irvine

1:50-2:10pm “Info in a bottleneck”
Gabrielle Gutierrez, UW Applied Mathematics

2:10-2:30pm “Modeling the perceptual experience of retinal prosthesis patients”
Michael Beyeler, UW Psychology & eScience Institute

2:30-2:45pm Break

Session III
Chair: Chet Moritz

2:45-3:35pm Keynote lecture: “Neural substrates of prospection”
Loren Frank, UC San Francisco

3:35-4:05pm “Interfaces to monitor and manipulate large-scale neural circuits in primates”
Amy Orsborn, UW Electrical Engineering & Bioengineering

4:05-4:20pm Break

Nino Ramirez, UW/Seattle Children’s Research Institute

4:50-5:40pm Keynote lecture: “Circuit basis for behavioral flexibility”
Takaki Komiyama, UC San Diego

5:45-7:15pm Reception in HUB 145 (one floor down)