Introductions

- VIP Leadership Team
  - Prof. Carla Zoltowski, Director
  - Prof. Jan Allebach
  - Prof. Yung-Hsiang Lu

- VIP TAs
  - Emily Bartusiak
  - Zhi Li
  - Ryan Dailey
  - Baekdu Choi
What are the goals of VIP?

- Provide undergraduate students an opportunity to work one-on-one with a faculty member and/or graduate student mentor
- Give undergraduate students exposure to faculty member’s research area
- Provide undergraduate students an opportunity to experience team-work
  - Collaboration
  - Mutual respect
  - Communication
  - Shared responsibility
  - Teaching each other
  - Leadership
- Allow undergraduate students to stretch their imagination and express their creativity
Typical elements of the VIP experience

• Weekly review meetings with the faculty advisor and/or graduate student mentor
• Weekly homework assignments to learn background for project during early part of semester
• Mixture of hardware and software experiences with real applications
• Each group gives a presentation on their project
  ▪ What were the goals?
  ▪ What did they accomplish?
  ▪ How does it work?
  ▪ What are the problems?
  ▪ What do they plan to do next?
• Participation in the Undergraduate Research Conference
• Final project presentations and review
VIP Projects for Spring 2019

- ADEPT-m Device Characteristics
- ADEPT-m GUI Development
- Aerial Robotics
- AI-Based Automation in the Classroom (AAC) - Eligible for ECE Senior Design
- Autonomous Aerial Vehicle (AAV)
- Autonomous Land Vehicle (ALV)
- CATME2
- Continuous Analysis of Many CAMeras
- Data Analytics for Smart Cities
- Deep Reinforcement Learning based Optimal Control of Complex Systems
- Drone Video
- Earth History Visualization
- Earth Remote Sensing with Signals of Opportunity
- Efficient Transfer Machine Learning
- EMC / Signal Integrity
- Forest Inventory Analysis
- Imaging and Printing Solutions to Real-World Problems based on Image Processing
- Imaging Processing and Analysis (IPA) - Eligible for ECE Senior Design
- Indoor Positioning System
- SoCET - Eligible for ECE Senior Design
- Video Analytics for Understanding Human Behavior
- Visual and Data Analytics
Expectations

• Lectures:
  • Participate in activities/discussion
  • Not on laptop/phone unless the activity requires it
  • Bring laptop
  • Bring your iClicker (we have paper forms today, but will not in the future
• Team:
  • Your team advisor(s) will provide an “Expectations” document that will detail their expectations for the team
• Syllabus
## Grading Criteria

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>Overall, the student’s accomplishments and effort, documentation, and teamwork and interactions are excellent. All of the seven (7) requirements have been satisfied.</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>Overall, the student’s accomplishments and effort, documentation, and teamwork and interactions are good. Six (6) of the seven (7) requirements have been satisfied.</td>
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<tr>
<td><strong>C</strong></td>
<td>Overall, the student’s accomplishments and effort, documentation, and teamwork and interactions are adequate. Five (5) of the seven (7) requirements have been satisfied.</td>
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<tr>
<td><strong>D</strong></td>
<td>Overall, the student’s accomplishments and effort, documentation, and teamwork and interactions are marginal. More than two of the seven (7) requirements are missing.</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>Overall, the student’s accomplishments and effort, documentation, and teamwork and interactions are unacceptable. More than three of the seven (7) requirements are missing.</td>
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Evaluation Criteria

Accomplishments and effort:
- Quantity of project accomplishments
- Quality of project accomplishments
- Completion of team assignments
- Initiative
- Learning needed for the project
- Overall

Documentation:
- Individual documentation
- Contributions to team documentation
- Contributions to team poster
- Use of appropriate tools (e.g., Git)
- Overall

Teamwork and Interactions:
- Team/sub-team meeting attendance
- On-time attendance
- Team/sub-team meeting participation
- Contributes useful ideas
- Recognizes others’ ideas
- Focuses effort on achieving goals
- Involves others in efforts
- Assists others with their efforts
- Manages time and tasks well
- Leadership skills
- Written communication skills
- Oral communication skills
- PD participation/attendance (__/10)
- Overall
Seven (7) Requirements

1. Maintain a design notebook (individual documentation), either paper or electronic as required by your advisor

2. Contribute as appropriate to project documentation

3. Complete mid-semester individual performance evaluation by Monday, February 18th at 5 pm in Blackboard.

4. Complete final individual performance evaluation by Friday, April 26th at 5 pm in Blackboard.

Continued
Seven (7) Requirements, continued

5. Complete mid-semester (due Monday, February 18\textsuperscript{th} at 5 pm) and final peer evaluation of team members (due Friday, April 26\textsuperscript{th} at 5 pm)

6. Complete final Purdue course evaluation and submit screen shot of completion to Blackboard (due April 26\textsuperscript{th} at 5 pm).

7. Participate in at least ten (10) Professional Development (PD) opportunities, including the three (3) required activities (1. intro lecture; 2. paper or abstract submission; 3. Oral or poster presentation), and ensure attendance is recorded in Blackboard or PD form is submitted via email by Friday, April 26\textsuperscript{th} at 5 pm.
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Other Information

- Card access to EE 013 will be updated on Fridays in January (Jan 11, Jan 19, Jan 26th)

- Two Blackboard sections
  - Lecture: general course announcements and resources
  - Lab:
    - Your VIP team specific info/assignments

- PD attendance
  - Will be posted in your lab Blackboard section.
  - Any errors need to be reported to the course staff within 2 weeks of the session.

- Forms for alternate PD opportunities can be submitted via Blackboard within 72 hours of the qualifying event
Rules for Use of the VIP Suite

- It is **ONLY** for use by VIP students, and **ONLY** for VIP-related activities!
- It is **NOT** to be used as the personal study space for VIP students!
- **No** food or drink is allowed! (Water in closed container)
- **No** opening the windows in the back meeting rooms!
- **PLEASE** keep the room neat at all times. Keep the table surfaces **CLEAN**. Pick up any litter that you drop.
- **PLEASE** report all infractions of these rules that you observe to a VIP staff person.
A focus of many of the Professional Development (PD) sessions:

Purdue Undergraduate Research Conference

• Expect that all students participate in either Oral or Poster Presentation
  • Thursday, April 4, 2019: Oral Presentations, 1-4pm, STEW 214ABCD
  • Tuesday, April 9, 2019: Poster Symposium, 9-11:30am & 1-3:30pm, PMU Ballrooms

• Deadline to apply:
  • Oral presentations, February 4, 2019: 3 – 5 page paper
  • Poster Symposium, March 1, 2019: abstract
Planning your PD

Review the PD session opportunities, and identify a plan to meet the 10 PD requirement.

- What sessions help you be successful on your VIP team/project?
- Does your team have special opportunities (e.g., company site visit)?
- What sessions help you prepare for the Undergraduate Research Conference?
- What weeks do you have exams and/or conflicts and can’t participate? Or a topic you are not interested in---then do not come that week!