2021-06-01

Agenda

- JM: Review completed tasks on Trello
- QH: Presentation slides
    - Mathematical model (design, result)
    - F-16 Model photo
    - BOM
    - Contribution
- JM: Approve new tasks on Trello

Meeting Notes

-

Action Items & Task Assignments

2020-05-24

Agenda

- JM: Review completed tasks on Trello
- CO: 5/31 Meeting Reschedule
- CO: Validation Data - Sys ID
- JM: Approve new tasks on Trello

Meeting Notes

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Action Items & Task Assignments

2020-05-17

Agenda

- JM: Review completed tasks on Trello
- CO: Schedule Test Flight
- JM: Approve new tasks on Trello

Meeting Notes

- Chris' top priority: time in the simulator
- Cam's focus: analyze data from simulator and try to use System ID toolbox

Action Items & Task Assignments

2020-05-10

Agenda

- JM: Review completed tasks on Trello
- CO: Sampling Rate (https://docs.px4.io/master/en/advanced_config/parameter_reference.html)
- CO: Access to Aircraft and Rotorcraft System Identification textbook
- CO: Most Recent Wind Vane Version
- JM: Approve new tasks on Trello

Meeting Notes

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Action Items & Task Assignments

2020-05-03

Agenda

- JM: Review completed tasks on Trello
- ML: Thursday time conflict
- JM: Approve new tasks on Trello

Meeting Notes

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Action Items & Task Assignments

2020-04-26

Agenda

- JM: Review completed tasks on Trello
- CM: Review Inertial moments data - CO: units? CM:Grams * in^2
- ML: Thursday meeting
- JM: Approve new tasks on Trello

Meeting Notes

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Action Items & Task Assignments

2020-04-19

Agenda

- ✓JM: Review completed tasks on Trello
- ✓CM: Spektrum Radio
- ✓CM: Real flight Sim
- ✓CM: ECL EKF https://docs.px4.io/master/en/advanced_config/tuning_the_ecl_ekf.html
- ✓JM: Approve new tasks on Trello

Meeting Notes

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Action Items & Task Assignments

2020-04-12

Agenda

- JM: Review completed tasks on Trello
- CO: Simulation Results
- CM: AOA purchasing and timeline
- JM: Approve new tasks on Trello

Meeting Notes

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Action Items & Task Assignments

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2020-04-5

Agenda

- JM: Review completed tasks on Trello
- CO, CM, QH, ML: Scheduling Final Project Presentation
- CO, CM, QH, ML: Scheduling Due Date Final Project Report
- CO: Simulation Results
- JM: Approve new tasks on Trello

Meeting Notes

- Poster presentation 9:20-9:35 am, Thursday, June 3
- Final report due 9 am on Wednesday, June 9

Action Items & Task Assignments

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2020-03-29

Agenda

- ✓JM: Review completed tasks on Trello
- ✓CO: Thursday Meetings conflict
- ✓QH: Coding for sensor
- ✓JM: Project schedule review
- ✓JM: Approve new tasks on Trello
- CO: For MP, Real time inputs

Meeting Notes

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Action Items & Task Assignments

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2020-03-15

Agenda

- JM: Review completed tasks on Trello
- ?
- JM: Approve new tasks on Trello

Meeting Notes

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Action Items & Task Assignments

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2020-03-8

Agenda

- ✓ JM: Review completed tasks on Trello
- ✓ CO: Update on PX4
- ✓ CO: Meeting Time Confliction 3/15
- ✓ CO: Matlab fix
- ✓ QH: AOA sensor

- ✓ ML: next step to find coefficients
- ✓ ML: access to article: system identification for small, low-cost, fixed-wing unmanned aircraft
- ✓ JM: Approve new tasks on Trello

Meeting Notes

- The AOA sensor provides both PWM and analog outputs

Action Items & Task Assignments

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2020-03-1

Agenda

- JM: Review completed tasks on Trello
- ML: Question about scaling down xml files of full scale F-16 on flightgear: can we use the existing 3D model's animation/sound,... for our RC model or develop a new one? or we don't need that at all?
- CO: Update on HorizonHobby, Aerodynamic Coefficients
- Qing: propose further work plan
- JM: Approve new tasks on Trello

Meeting Notes

- Cam kept pushing HorizonHobby for the aerodynamic coefficients
    - Reported that they are not open to the public
        - Said what they have is very limited
        - But then said they couldn't give us the information because we're "public"
    - But they may send it anyway … we'll see
    - May get information from professor in Colorado School of Mines
    - They have a wind tunnel there
- Qing work focus
    - Responsible for system test & building
        - Combine with PX4
        - Sensor coding and testing
        - GPS & IMU - already done
        - Angle of attack & airspeed sensors
        - Angle of attack question: how do we attach it and where do we attach it
            - Get the sensors connected to the PX4
            - Get the software working so it reads from these sensors
            - Posted on github

    - Will also do data analysis to calculate the coefficients based on data collected by Chris

Action Items & Task Assignments

- See Trello
- CM: Check with Dr. Cal about wind tunnel

2020-02-22

Agenda

- JM: Review completed tasks on Trello
- Questions
- JM: Approve new tasks on Trello

Meeting Notes

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Action Items & Task Assignments

- See Trello

2020-02-15

Agenda

- JM: Review completed tasks on Trello
- CM: Demo
- CO: Demo
- ML: Demo
- QH: Demo
- ...
- JM: Approve new tasks on Trello

Meeting Notes

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Action Items & Task Assignments

- See Trello

2020-02-01

Agenda

- ✓ JM: Review completed tasks on Trello
- ✓ All: Review PDS
    - Approve or assign tasks for revisions
- All: How do we measure and calculate Aerodynamic Coefficients
    - ✓ Lifting Line Theory: Aerodynamic coefficients
    - Static Tests: Weight, Wing Planform Area, etc
- CM: What level of tracking for GPS is Galois expecting, may require additional hardware (Real time GPS)
    - Is a pitot tube for airspeed acceptable?
    - Do we want to have a telemetry data collection - Etha's comment
    - What should the procedures be if we break components upon install /fitting to the the F16 model
    - Review with Galois about 3D CAD model creation for weight and balance / placement of sensors.
- CO: Galois Team Review Aerodynamic Coefficients and Variables on git and provide feedback AC Variables
- ✓ JM: Approve new tasks on Trello

Notes

- Unclear what to do with wind
    - When we do flight recordings will need to figure out how to measure wind
- Risks
    - Are there significant dynamics in the actuators
- Need hardware components

Action Items & Task Assignments

-

2020-01-25

Agenda

- ✓ JM: Review completed tasks on Trello

- ✓ All: Review PDS
    - Approve or assign tasks for revisions
- ✓ JM: Ownership of project components
    - Winter Term
        - Instrumentation and characterization of the physical model
            - QH, CM
        - Simulation
            - Fusion algorithm for estimating velocity
            - CO, ML
- ✓JM: ECE 412 Grading Criteria
- JM: Approve new tasks on Trello
- CO: SITL/HITL
- CM: Team Questions for Initial Product design
    - What coding language should we use is the priority communicating with Pixhawk or CSAF
    - What should our back up plans be our dynamic model doesn't work, RC model breaks?
    - Can we set up a time to talk out this section completely?

Notes

- Unclear what to do with wind
    - When we do flight recordings will need to figure out how to measure wind
- Risks
    - Are there significant dynamics in the actuators
- Need hardware components

Action Items & Task Assignments

- ✓ JM: Ask Mr. Faust for an example of a good PDS

2020-01-20 (Delayed due to MLK)

Agenda

- ✓ All: Review PDS
    - Approve or assign tasks for revisions
- ✓ CM: Is everyone alright with the verification plans for the project being vague currently, It is a deliverable for later in the project, but requires a bit more understanding of the mathematical model to be better developed.
- ✓JM: ECE 412 Grading Draft
    - Project Proposal (30%, 10 points)
        - +2 when approved by adviser
        - +2 when approved by sponsor

        - +6 when all assigned sections completed and approved
        - -1 for each week late (past January 30 deadline)
    - Weekly Progress Reports (10%, 3 points)
        - +1 on time
        - +1 all tasks completed
        - +1 explanations for any tasks not completed, and path to resolution
        - 0 - more than 1 day late
    - Project Tasks (40%, 6 points)
        - +6 all tasks completed
        - 0 no tasks completed
    - Meeting Attendance (20%, 5 points)
        - +1 On time (<2 minutes late)
        - +1 Present for full meeting
        - +1 Contribute constructively
        - +1 Draft tasks prepared in Trello for following week (approximately 10 hours of work)
        - +1 Complete meeting with tasks that have clear completion criteria
        - -1 Late
        - -1 Leave early
        - -1 Silent - not constructive contributions
        - 0 - unexcused absence
    - Gradesheet Draft
- ✓ JM: Review proposed tasks for this week on Trello

Notes

- Make sure the criteria in the ECE 412 Evaluation Form are met, or tasks assigned to complete them
- Concept of Operations
    - JM approves
- Stakeholders
    - JM approves
- Requirements
    - JM approves
- Specifications

Action Items & Task Assignments

- QH: Concept of operations revision to make sure it includes the criteria in the document from Mr. Faust
- ✓ MP: Review PDS sections and provide feedback
- ✓ JM: Provide written feedback on the PDS

2020-01-11

Agenda

- ✓JMc: Discord
    - ✓How to connect
    - ✓Michal, Matt, Ethan
- ✓ JMc: Importance of logbooks to sponsor
- ✓ JMc: Review of project proposal draft
    - Primary first milestone
- ✓ JMc: Michal - Review of initial meeting
    - Two meetings each week, M 10-11 and Th 11:00 - 11:15ish
- ✓ JMc Tasks for week
- ✓ CO: Questions for Michal

Notes

- Decided to use Trello for project management and tracking
- Log books not needed
    - Will use comments in Git and our other collaboration tools

Action Items & Task Assignments

- ✓ CO: Set up Trello and invite all of us to join (mcnames@pdx.edu) (cmersman@pdx.edu) (mql2@pdx.edu) (hou@pdx.edu)
- CO: ✓ Executive Summary, Requirements, ✓ Stakeholders
    - Completion criteria: complete draft circulated to the team, sponsor, and adviser by Friday at noon
- All: Review PDS prior to 10 am meeting and after Friday at noon
- All: Tasks drafted for approximately 10 hours representing the tasks you think you should be assigned to complete during the following week.
- CM: ✓ Deliverables, Initial Product Design, Verification Plans
    - Completion criteria: complete draft circulated to the team, sponsor, and adviser by Friday at noon
- ✓ML: Project management timeline, budgets and resources, development process
    - Completion criteria: complete draft circulated to the team, sponsor, and adviser by Friday at noon
- QH: ✓Concept of Operations, Product Design Specifications
    - Completion criteria: complete draft circulated to the team, sponsor, and adviser by Friday at noon
- CM: Set up biweekly meeting invites with Zoom links

2020-01-05

Agenda

- Weekly meeting schedule
    - One hour working meeting
        - 10 am
        - 11 am Thursdays - brief check in
            - Brief check in (15 minute standup)
- Weekly progress reports - emailed just prior to our weekly meeting
- Weekly tasks (stories)
    - Clear completion criteria
- Collaboration tools
    - Google Drive
    - Email
    - Github
    - Discord
- Project Proposal
    - Requirements
    - Schedule
    - Plan - tasks/stories (no more than 4 hour chunks)
- Expectations for moving forward
- Any needed resources?

Action Items & Task Assignments

- ✓JMc: Fill in first agenda
- ✓ JMc: Install Discord