# Strategic Plan: Fall 2023 (example)

# Ken Oguri, Assistant Professor at Purdue Aero/Astro

## April 27, 2025

## 1 Semester Goals

#### Professional Goals

- 1. Advising: help new students/projects get started; help everyone keep motivated; meet everyone at least every other week
- 2. Proposal: submit XX to NASA
- 3. Proposal: continue discussion with AFOSR on YY and a potential visit to AFRL/AFOSR
- 4. Paper: complete & submit the journal paper on XYZ to AIAA JGCD by the end of Oct
- 5. Paper: complete & submit the journal paper on XYZ2 to AIAA JGCD by the end of Dec
- 6. Paper (if time allows): complete & submit the conference paper on ABC to IEEE ACC by the end of Sep
- 7. Research: complete theoretical analysis of DEF by the end of Oct
- 8. Research: complete numerical simulations of DEF by the end of Nov
- 9. Research (if time allows): start theoretical analysis of a new topic GHI
- 10. Talk: prepare two talks for IEEE CDC by late-Nov
- 11. Teaching: teach AAE 440 nothing special

Personal Goals: (\*obviously, you don't need to include personal goals in the version you share with me)

- 1. Small exercise everyday
- 2. Spend time together with my wife at least once a month (either in IN or IL)
- 3. Plan for thanksgiving and winter break with my wife

# 2 Key Events

### Professional events:

- 1. Proposal: NIAC Phase I Step B due Sept 14 2023
- 2. Conference (myself): IEEE CDC final version submission due Sept 10; conference: Dec 13-15
- 3. Conference (students): AAS GNC abstract submission due Sep 8; full paper due mid-Dec
- 4. Visiting scholars: Hirotaka Sekine (Sep 4 27); Hal Oki (Nov 20 Dec 8)
- 5. Service (JASS cislunar space issue guest editor): XXX
- 6. Service (IEEE ACC associate editor): YYY

Personal events: (\*obviously, you don't need to include personal events in the version you share with me)

- 1. Thanksgiving break
- 2. Winter break

# 3 Short-term Objectives

Week	Objectives
Aug 21	<ul> <li>Fall 2023 begins</li> <li>Proposal (NIAC): create overall format &amp; send email to collaborators</li> <li>Research: complete + submit CDC paper final version - SCvx* (submission due Sept 10)</li> <li>Teaching: create first decks of slides (intro + review) + PS1 + find graders</li> </ul>
Aug 28	<ul> <li>Proposal (NIAC): create technical approach section + complete other sections</li> <li>Research: complete + submit CDC paper final version - smooth indirect (submission due Sept 10)</li> <li>Teaching: create next decks of slides (rigid body A)</li> </ul>
Sep 4	<ul> <li>Proposal (NIAC): complete technical approach section</li> <li>Research: submit both CDC papers final version (due Sep 10)</li> <li>Teaching: create PS2 + create slides (rigid body B-D)</li> </ul>
Sep 11	<ul> <li>Proposal (NIAC): complete and submit (due Sep 14)</li> <li>Teaching: create PS3</li> </ul>
Sep 18	• Research (ACC): theoretical analysis & numerical simulation
Sep 25	• Research (ACC): complete paper + submit • Teaching: create PS 4
Oct 2	• Research (JGCD): complete numerical result section + intro • Teaching: create mid-term exam
Oct 9	<ul> <li>October break: Oct 9-10</li> <li>Research (JGCD): complete paper</li> <li>Teaching: create PS 5</li> </ul>
Oct 16	• Research (JGCD): send to co-authors • Teaching: exam
Oct 23	• Research (JGCD): complete + submit • Teaching: create PS 6
Oct 30	<ul> <li>Paper (JGCD2): re-formulate the theory</li> <li>Research (IEEE CDC): create slides for SCvx*</li> </ul>
Nov 6	<ul> <li>Paper (JGCD2): re-do numerical simulation</li> <li>Research (IEEE CDC): create slides for state-constrained smooth indirect method</li> <li>Teaching: create PS 7</li> </ul>
Nov 13	<ul> <li>Paper (JGCD2): complete numerical simulation</li> <li>Research (IEEE CDC): finish creating slides for the two talks</li> <li>Teaching: buffer</li> </ul>
Nov 20	• Thanksgiving break: Nov 22-25
Nov 27	<ul> <li>Paper (JGCD2): complete introduction</li> <li>Paper (JGCD2): add discussion section – computational complexity and performance in comparison to other methods</li> <li>Teaching: create final exam</li> </ul>
Dec 4	<ul> <li>Paper (JGCD2): complete and submit paper</li> <li>Research (IEEE CDC): presentation practice</li> <li>Teaching: buffer</li> </ul>

Dec 11	• attending IEEE CDC
Dec 18	<ul> <li>Research (2024 IEEE CDC): start theoretical analysis</li> <li>Teaching: finalize grades</li> </ul>
Dec 25	<ul> <li>Winter break</li> <li>Teaching: prep for Spring 2024</li> </ul>
Jan 1	<ul> <li>Winter break</li> <li>Teaching: prep for Spring 2024</li> </ul>
Jan 8	<ul> <li>Spring 2024 begins</li> <li>Teaching: prep for Spring 2024</li> </ul>