

Session 1 (1/9/26):

Big issues: communication

- Join Toastmasters – or other speaking clubs
- ISU Student Innovation Center offers Pitch Workshops (you learn to do a 90 second project pitch)
- Offer mentorship to underclassmen. This can improve communication.
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Advice:

- Leverage ISU Alumni Resources:
 - CyHire – keep an updated profile
 - Engineering Career Services – can schedule mock interviews for even more interview experience
 - Career Fair – get ready for February! (Tuesday, Feb 10 – 12PM - 5PM)
 - ISU Research Park – post graduation internships sometimes offered or early talent development programs
- Independent projects
- Open source projects on Github and contribute
- ISU Job Board for research assistant or lab tech or something just to get some foot in the door with a professor.
- Tutoring
- Reconnect with old professors that knew you about opportunities

Developed a full-stack academic scheduling tool for KAU using React, TypeScript, Node.js, Express, and Sequelize.

Developed a full-stack academic scheduling tool:

- University was using excel or paper (very inefficient) – cutting down scheduling time by 60%
- Scheduling out all classes for a department
- Timeframe was to finish from June to August
- Flexible budget
- 5 departments tried to use out of 30 departments
- # professors or classes

How:

- Backwards compatibility

Impact:

- 5 departments adopted,

Accomplishment + Metric + How + Why

Developed a full-stack academic scheduling tool (KAU Faculty Scheduler) to replace manual excel/paper system for 30 departments using full stack (React, TypeScript, Node.js, Express, and Sequelize), cutting down scheduling time by X%, saving KAU \$X/year.

Implemented role-based access control, dynamic dashboards, and admin features for course and user management.

Background:

- Different roles, Dean, Department Head, Chair, all have different access to parts of the site.
- Faculty hours, courses, times, locations of courses, management.
- Admin features is separate for IT access to add users to the system (user management).
- Time constraint – completed in 2 days to get security implemented.
- Pain – taking too long to schedule courses (time).

Implemented security feature in 2 days and X iterations of data validation testing with role-based access control to Faculty Scheduler using RESTful APIs and JWT authentication for Faculty to schedule courses (hours, locations, times) restricting sensitive information to authorized users.

Integrated RESTful APIs, JWT authentication, and robust data validation for secure, scalable performance.

Next session: Tuesday (6AM CST).