



TRANSITIONING FROM COLLEGE TO CAREER

A presentation for USF IEEE and USF FWEA

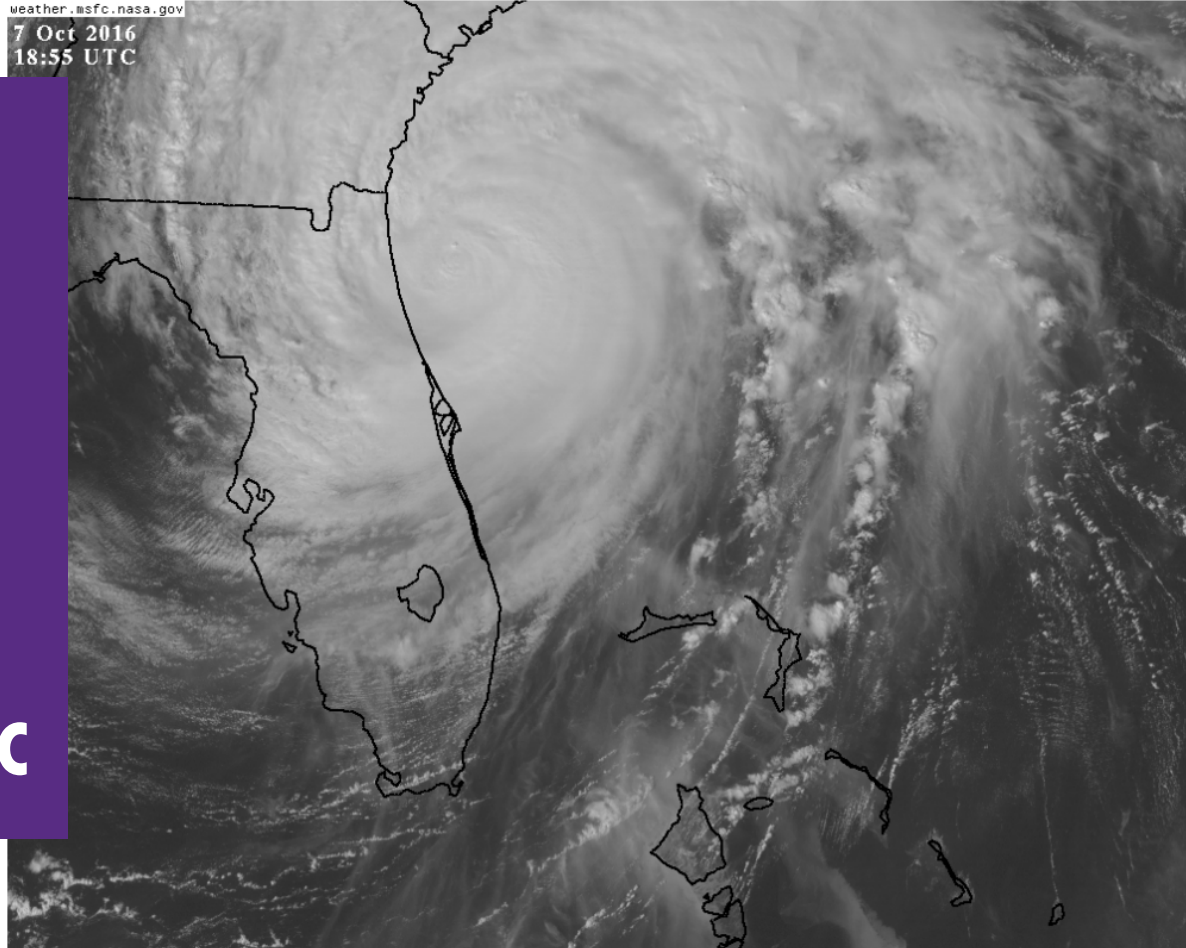


INTRODUCTION:

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USF '16 BS EE,
ELECTRICAL
ENGINEERING
INTERN WITH
MCKIM & CREED, INC**

weather.msfc.nasa.gov

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PRE-PROFESSIONAL:

- Withdrew in good standing from the University of Florida due to career indecision.
- Got married to the man of my dreams and moved back to the Tampa Bay area.
- Lived on a sailboat for a year.
- Worked at a variety of positions in the Veterinary Industry.

WHO AM I?

IN SCHOOL AGAIN:

- Took on student loans to go back to school full time at USF.
- Participant in the University of Illinois at Chicago Summer Institute on Sustainability and Energy.
- Designed and 3D printed an electrical inverter/generator.
- Became a teaching assistant for the USF MAKE class
- Accepted for a summer internship at McKim & Creed and then asked to stay on during my senior year.
- Passed the Fundamentals of Engineering Exam

WHO AM I?

POST-PROFESSIONAL:

- Registered with the State of Florida as an official Engineering Intern
- Wore out copies of the National Electrical Code (NFPA-70)
- Worked on several multi-million dollar projects in the Water and Wastewater industry
- Took up foraging wild plants and mushrooms as a hobby
- Hiked to the top of Half Dome
- Started a small farm (chickens, ducks, vegetable garden)

WHO AM I?

LOOKING FOR A JOB: WHERE DO I START?

In-Network

Word of mouth is still one of the most dependable ways to get a job if you have a good network. Keep in touch with classmates, professors and friends. If you are interested in a new field or industry, find a related professional organization and go to a few meetings. Always try to get to know someone before asking for a reference or a mentorship.

“

“Far and away the best prize that life offers is the chance to work hard at work worth doing.” — Theodore Roosevelt

”

Out-of-Network

Online job search engines can provide targeted results. Listings change regularly so they should be monitored every week while job hunting. Set up an account on LinkedIn early and keep your status up to date. Through this tool, you can interact with recruiters and find out more about a company before applying.

THE INTERVIEW PROCESS

CV (Cirrriculum Vitæ)

Concise and Complete: 2 or more pages
Chronological order
Education, achievements and honors
Include a cover letter specific to each job



Résumé

Short and Sweet: 1 page only
Tailor the message to the job each time
Don't try to include everything



Career Fairs

Research ahead if interested in a specific company
Dress to impress, business casual recommended
Have a copy of your resume and CV ready
Shake hands and make small talk
Let the representative know if you are truly interested and when you will be available



Phone Interview

Be available at the predetermined time
Go to a quiet room for the conversation
Smile while speaking



In-Person Interview

Dress to impress, business casual at minimum
Believe in yourself, be confident!
Working interview may also be requested



DIFFERENT TYPES OF IN-SCHOOL OPPORTUNITIES

Student Internship

- Sometimes can lead to a full time position with same company
- Can provide valuable experience
- Helps you “get your feet wet”
- Typically paid

Temporary Work

- Agency provides the matchmaker opportunity
- Occasionally leads to full time position with the same company
- Always paid

Research Fellowships/Graduate Work

- Can lead to great achievements
- Opportunities to be published
- Grant writing
- Often low or no pay at first

FROM ANOTHER PERSPECTIVE:

THE MENTOR

Professional Associate and/or Friend

You don't always need a mentor **01**

Professional connections can come from friends **02**

Don't be a pest, but keep in regular contact **03**

Meet in person every few months if possible **04**

GOT THE JOB, NOW WHAT TO EXPECT

The Learning Has Just Begun

- The most important thing that college can teach you is how to learn
- Listen carefully to instructions and ask questions during the process
- Take constructive criticism in stride

Be Your Best Self

- Most work projects succeed best as a team effort
- Respect those around you, including people under your pay grade
- Remember that you are now a representative of the company/org/institution

Stand up for yourself and your work

- Speak your mind whenever the situation calls for it
- Engineers regularly work over 40 hours per week, factor this into salary offers
- Work-Life balance is a personal objective and will likely change over time



WATER AND WASTEWATER INDUSTRIES

- Local Governments (City, County) typically own and operate their own community treatment plants. Staffing needs depend on local funding and community size
- Large independent operators also exist, such as Tampa Bay Water. This non-profit organization has been serving the drinking water needs of multiple communities across the Bay area for decades
- State and Federal government groups provide grants for targeted projects such as flood and hurricane resiliency. They also play regulatory roles, enforcing rules designed to protect public health
- Consultants offer evaluation, design, engineering, programming and other services as requested. Client is typically the Local Government or another consultant looking to subcontract portions of a large job
- Contractors bid and perform the work to build new and/or upgrade existing facilities as required by the design contract
- Vendors and Manufacturers provide the material necessary for the contractors to complete the project as designed



RECENT EXPERIENCES IN CONSULTANT WORK

01

1. DESIGN & CONSTRUCTION ADMIN: LARGE PUMP STATION IN COASTAL AREA

- Automatic transfer switchgear with backup power generation and a new utility service
- Hazardous area classification mitigation strategies

02

2. DESIGN & CONSTRUCTION ADMIN: BACKUP POWER TO 30 LIFT STATIONS

- Standard design template created with variations according to utility service type and size
- Construction split into 6 separate contracts given to 3 different builders

03

3. DESIGN CRITERIA PACKAGE: TREATMENT PLANT MAJOR UPGRADES

- On-site construction observation discovered grounding/bonding issues in renovation work
- From initial design to construction substantial completion has taken over 6 years

04

4. EVALUATION AND DESIGN: LAB POWER QUALITY ISSUES

- UPS power backup provided for critical instrumentation
- Voltage drop and equipment supply requirements cataloged

05

5. DESIGN & LIMITED CONSTRUCTION ADMIN: MOTOR CONTROL PANEL REPLACEMENT

- Redesign of outdated control system for sludge thickener and washwater basins
- Entire project was designed, bid and built in under 4 months



MCKIM & CREED IS PEOPLE HELPING PEOPLE



STEADY GROWTH

Averaging 30% growth year-over-year across all business units for last 5 years



ESOP

Employee stock ownership plan delivers the company profits to the employees



FAMILY

Maternity/Paternity benefits, inclusive workplace, and flexible work hours available as needed



RESOURCES

Early Career Professionals groups, continuing education and training organized to develop talent





Thank you for the opportunity.

QUESTIONS