CHRISTOPHER R. CATTRON

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EDUCATION

2019 Missouri University of Science and Technology (Missouri S&T)

Master of Science in Civil Engineering (GPA: 3.9/4.0)

Certification in Contemporary Structural Engineering

2018 Missouri University of Science and Technology (Missouri S&T)

Bachelor of Science in Civil Engineering (GPA: 3.3/4.0)

RESEARCH EXPERIENCE

2018 Research Assistant

Department of Civil, Architectural, and Environmental Engineering - Missouri S&T

- Prepare test specimens and perform tests in accordance with ASTM standards
- Collect and prepare data for submission to research team lead
- Maintain condition of laboratory station and laboratory equipment

PROFESSIONAL EXPERIENCE

2019 Engineer Intern

Larson Engineering, Inc. (St. Louis, Missouri)

- Prepared structural design calculations and structural drawings for pre-fabricated steel and aluminum buildings including guard booths, equipment enclosures, etc.
- Utilized RISA-3D to model structural systems and analyze static loads
- Designed using the latest American codes and standards.
- Created and revised MathCAD calculation templates for use in the design of aluminum facade structural members and curtain-wall systems.

2017 Structural Engineer Intern

Great Rivers Greenway (St. Louis, Missouri)

- Performed field visits to bridge/structural assets throughout greenways in region to gather data, record observations, collect measurements, and take photographs.
- Collected and uploaded relevant plans, drawings, and other documents for each structural asset
- Modified bridge layer in GIS to better organize available data
- Drafted a guide on the use and organization of the GIS bridge layer
- Presented summary of findings in an oral presentation and detailed findings in a written report

2015 **Project Engineer Intern**

Concrete Strategies, Inc. (St. Louis, Missouri)

• Oversaw site work for a concrete restoration project in St. Charles, Missouri

- Detailed project objectives and timeline, with assistance of Project Manager
- Tracked amount of removal, grading, and pouring that occurred daily
- Interacted with public, city inspector, and sub-contractors courteously and professionally

OTHER EXPERIENCE

2019 – Present

Resident Director

Missouri S&T Residential Life Department (Rolla, Missouri)

- Supervise a staff of 20 student leaders, including 15 Resident Assistants (RAs), four Senior RAs, and one Head Resident
- Oversee the operations of a residence hall with an occupancy capacity of almost 700 residents that predominantly houses first and second-year college students
- Respond to emergency and crisis situations working cooperatively with University Police, Counseling Services, and other campus staffs
- Serve as a Conduct Officer and an Advisor to local student hall government
- Implement a residential curriculum for student development in the residence halls

2018 - 2019

Recycling Coordinator

The Community Partnership (Rolla, Missouri)

- Managed a textile and salvage clothing recycling program for a not-for-profit thrift store
- Recruited, trained, and supervised volunteer groups of up to 50 volunteers
- Processed clothing donations and prepared salvage clothing for baling
- Oversaw a waste reduction program responsible for diverting over 45 tons of salvage textiles from the landfill
- Reduced the amount of textile waste that goes to the landfill by baling and selling salvage clothing and increasing clothing sales in-store
- Coordinated the spending of grant-acquired funds to purchase shelving, bins, and storage structures to contain off-season clothing

2017 - 2018

Head Resident

Missouri S&T Residential Life Department (Rolla, Missouri)

- Co-supervised a student-staff of approximately 15 student leaders
- Planned and led training activities; implemented educational plans to support the residential curriculum and advance the department's learning goals.
- Facilitated regular one-on-one meetings with staff members, providing regular feedback regarding administrative and community development expectations
- Coordinated scheduling and maintained residence hall operation records
- Supported hall government by attending meetings and developing working relationships with executive board members
- Served as a resource to student-staff members as they developed and grew in their positions

2017 Senior Resident Assistant

Missouri S&T Residential Life Department (Rolla, Missouri)

- Directed a mentor group of three first-year Resident Assistants
- Assisted in training and development of first-year staff members
- Developed and led team-building activities
- Areas of training include community building, work-school balance, educational programming, conflict mediation, policy enforcement, and more
- Planned and facilitated staff selection group activity as part of staff hiring process
- Manage all duties associated with the Resident Assistant position

2015 – 2016 Resident Assistant

Missouri S&T Residential Life Department (Rolla, Missouri)

- Led students in addressing issues, directing them to appropriate resources
- Create, plan, prepare, publicize, and lead hall programs targeting academic success, personal, professional, and social development, and community building
- Connect with residents and encourage involvement; foster a sense of community
- Resolve conflicts safely and effectively while enforcing hall policy

2014 – 2015 Floor Governor / HIRC Committee Member

Residential College Association (RCA) – Missouri S&T (Rolla, Missouri)

- Debated, discussed, voted on, and passed budgets and legislation for the benefit of the residents of the Residential Colleges
- Worked cooperatively with RAs to improve well-being of all residents in the halls
- Voiced the concerns of residents to the RCA body or RAs
- Acted as role-models to encourage good floor conduct and behavior
- Collaborated with members of the Hall Improvement and Retention Committee (HIRC) committee to allocate funds for improvements of the Residential Colleges

2014 **Design Team Member**

Steel Bridge Team – Missouri S&T (Rolla, Missouri)

- Worked cooperatively with other team members to design a 1/10 scale model steel bridge to compete against other teams from universities across North America
- Considered real world engineering issues such as spatial constraints, strength, serviceability, fabrication and erection processes, safety, aesthetics, and cost
- Learned use of structural analysis and design software STAAD.Pro

2014 Receiver/Stocker/Cashier

Society Saint Vincent de Paul Thrift Store (St. Charles, Missouri)

- Provided courteous and welcoming customer service; responded patiently to customer complaints and concerns.
- Received, sorted, priced, and stocked donations according to store standards; rotated stock as necessary

Managed cash register with integrity and accuracy

2013 "En français à Québec" French Summer Program Participant

Collège Saint-Charles-Garnier (Québec City, Québec)

- Adapted successfully to new culture and living environment
- Built relationships and communicated effectively with people of diverse interests, values and perspectives
- Improved French language skills through daily interactions with local people and French-spoken classes
- Attained valuable historical, cultural and political knowledge of French Canada through formal tours, social gatherings, and independent research

2011 - 2014 Tennis Instructor

Craigwell, Inc. (St. Charles, Missouri)

- Provide Instructed individuals or groups of children/adolescents in tennis rules, strategy, and technique.
- Worked with children and adolescents aged 4 to 17.
- Assisted with court maintenance and equipment upkeep.

HONORS AND AWARDS

2020	Davy Jones Locker Award – Thomas Jefferson Hall Association – Missouri S&T
2019	Best Presentation – Missouri S&T Chapter of Chi Epsilon National Honor Society –
	"Seismic Vulnerability and Retrofitting of Unreinforced Masonry Buildings"
2019	Initiated Member - Missouri S&T Chapter of Chi Epsilon National Honor Society
2018	Bronze Pin – National Residence Hall Honorary – Missouri S&T
2018	Distinguished Service Award – Missouri S&T Residential Life
2018	4 Year Award – Missouri S&T Residential Life
2017	Dean's List – Missouri S&T Department of Civil, Architectural, and Environmental
	Engineering
2016 - 2017	Aaron and Zelda Greenberg Scholars Program - Missouri S&T Department of Civil,
	Architectural, and Environmental Engineering
2015 - 2016	Joseph Senne, Civil Engineering Scholarship - Missouri S&T Department of Civil,
	Architectural, and Environmental Engineering
2014 - 2016	Excellence Scholarship – Missouri S&T
2014 - 2016	Curators Scholar Scholarship – Missouri S&T
2014 - 2015	Karl Hasselmann Scholarship – Missouri S&T
2014 - 2018	Bright Flight Scholarship – Missouri Higher Education Academic Scholarship
2014	Most Outstanding Graduate: Physics Department – Francis Howell North
2014	Most Outstanding Graduate: French Department – Francis Howell North
2013	Student of the Week - Overall Program – "En français à Québec" French Summer
	Program
2013	Student of the Week - Advanced Class - "En français à Québec" French Summer
	Program

LICENSES AND CERTIFICATIONS

2018 Engineer Intern (E.I.) - Missouri Board For Architects, Professional Engineers,

Professional Land Surveyors and Professional Landscape Architects - Certification

number EI-2018026008

SOFTWARE EXPERIENCE

- RISA-3D Structural
- AutoCAD
- MathCAD
- Microsoft Office
- ANSYS
- HTML/CSS
- Python

MEMBERSHIPS

- American Society of Civil Engineers Associate Member, since 2020
- Chi Epsilon National Honor Society Alumni, since 2019

VOLUNTEERING

2019	The Community Partnership Resale Shop – Salvage Bale Volunteer
2017	Second Saturday Service – Audubon Trails Nature Center – Student Volunteer
2016	MLK Day of Service 2016 – H.O.P.E. House – Student Volunteer
2015	Hearts for Malawi – Volunteer Server, Volunteer Attendant
2013 - 2014	Success Leader – Algebra Tutor, Freshman Mentor – Francis Howell North HS
2010 - 2013	F.U.E.L. (travelling performing arts group, service team)

LANGUAGES

- English (native)
- French (intermediate written and conversational oral)