# American Center for Mobility

## Job Description

<table>
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<th>Job title: EV Charging Intern</th>
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<td>Location: Willow Run, Ypsilanti, MI</td>
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<td>Reports to Technical Director</td>
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The American Center for Mobility (ACM) is a global development center for transforming the way industries advance safe, sustainable, and secure mobility technologies. ACM offers: an Advanced Mobility Proving Ground with test environments featuring specialized infrastructure, equipment, facilities and resources; An EV Charging testbed for testing EV charger performance; An innovation and technology campus with an industrial tech park for the co-location of mobility companies; Event and demonstration areas for showcasing mobility technologies and convening industry activities. The American Center for Mobility is open to private industry, start-ups, government, standards bodies, and academia.

ACM is seeking a summer intern to support new initiatives in our EV Charging Basecamp as part of our safe, secure, and sustainable transportation efforts.

The American Center for Mobility (ACM) is establishing an EV Charging & Interoperability Testbed (a.k.a “EV Charging Basecamp”) designed to address critical needs in EV charging interoperability testing and collaboration. ACM is moving forward with a phased development of this EV charging & interoperability test bed to work with OEMs, EVSEs and CPOs to improve the consumer and fleet EV charging experience. ACM plans to facilitate access at their facility to a multitude of different electrical vehicle charger types from various EVSE manufacturers to original equipment automobile manufacturers and others involved in EV research and development for collaboration, testing and development.

The intern will support the project team that is responsible for engineering, implementation, and operation of the test bed through its phased development. The position requires supporting engineering deliverables through collaboration with other engineering teams, EVSE, OEM, CPO and utility companies to ensure successful integration of components, design, development, testing, and reporting of EV charging interoperability including ensuring “handshake,” charging, data exchange and speed of test feedback. This is an ideal job for a hands-on student with an interest in electric vehicle charging.

## Intern Responsibilities:

The intern will support the project team on the EV Charging Basecamp project for testing interoperability and other EV charging related projects such as:

- Support Federal grant EV Charging interoperability testing objectives such as
  - Understanding relevant standards such as ISO-15118, DIN 70121, OCPP, J1772, CCS, J3400, and summarizing EV Charging Interoperability requirement for Standard compliance.
  - Support development of interoperability technical requirements and test cases for US specific system/feature implementation.
  - Support ensuring all system requirements are met through testing activities such as interface, integration, functional, performance, interoperability and security testing as needed.
  - Performing charging interoperability testing in lab & field settings.
  - Support updating Vehicles/Charging Stations with Hardware and/or Software and perform tests to ensure successful updates.
  - Support charging System (components and software) operation by monitoring logs and communications between units.
- Documenting test results. Collect, analyze, and provide test reports to clients.
- Supporting requirements development and phased buildout of EV testing capabilities.
- Supporting customer proposal development for EV charging initiatives
- Collaborate with project teams on system functionality & maintain targets & testing/validation milestones.

Skills and Qualifications:

- Junior, Senior, or Graduate student in an engineering or technology related field,.
- Demonstrated interested to be working in transportation electrification related mobility fields. Students who have current/prior thesis / projects / courses / publications in EV and EV charging related topics are particularly encouraged to apply.
- Hands-on experience with EV Charging Systems a plus.
- Experience working on Federally funded grant projects (experience with U.S. DOE) a plus.
- Strong oral, written and editing communications skills.
- Flexible and a self-starter; able to manage multiple concurrent projects while also being highly detail-oriented with an attention to quality.

Additional Requirements:

Qualified students must be actively enrolled at an institution of higher learning and a Michigan resident or out of state student with Michigan residency in order to be considered. The position is full-time onsite.

ACM is an equal opportunity employer that celebrates diversity and is committed to creating an inclusive environment for all employees. ACM does not discriminate on the basis of race, religion, color, sex, gender identity, sexual orientation, age, disability, national origin, veteran status or any other basis covered by appropriate law. All employment is decided on the basis of qualifications, merit, and business need.