

Carnegie Mellon University is seeking a Postdoctoral Fellow to conduct research on wireless communications networks, under the direction of Professor Jon Peha. Research topics include (i) wireless vehicular networks, which allow vehicles to communicate with each other and with roadside infrastructure, and (ii) spectrum-sharing mechanisms and the policy issues of spectrum sharing. Potentially relevant technologies include C-V2X, WAVE, DSRC, Wi-Fi, LTE unlicensed, 4G to 6G cellular, and CBRS.

Required background: Ph.D. in electrical engineering, computer engineering, engineering and public policy, computer science, or other related field.

The tentative period for this position is January 2022 to June 2023, with a possibility of extension.

Responsibilities include:

- Produce and assess novel algorithms, protocols, and spectrum management policies for use with vehicular networks and other wireless communications systems.
- Develop, assemble and integrate simulation software tools that can realistically represent the behavior of various wireless communications devices, and moving vehicles that carry wireless devices.
- Use a variety of tools to assess the effectiveness of both novel and well-established wireless communications systems and sharing mechanisms.
- Search and survey the existing literature on relevant wireless technologies and spectrum management policies.
- Participate in writing documents for research journals, conference proceedings, technical standards and/or government spectrum proceedings. Contribute to research presentations. May also assist in grant writing.
- Other duties as assigned.

Applications should include a cover letter, a curriculum vita, 3 to 5 research papers, a 1 or 2 page statement of research interests and experience, and a list of 3 or more references including contact information. Send applications to [cmupostdoc@gmail.com](mailto:cmupostdoc@gmail.com)

The position will remain open until it is filled. You can be certain that your application will be given full consideration if it is received by Dec. 15, 2021. Applications are still welcome in late December, up to the end of January. (If you want to find out if the position is still open before putting an application together, you can email [cmupostdoc@gmail.com](mailto:cmupostdoc@gmail.com))