

# Fighter Jet Manned-Unmanned Teaming Technologies

Temporary full-time positions, possibility to obtain a doctorate, remuneration according to E13 TVöD

The Professorship of Aircraft Dynamics and Flight Guidance at the Department of Aerospace Engineering conducts research in the field of ***human-autonomy cooperation in aviation***. One focus is intelligent ***cockpit and UAV automation*** including ***human-machine interfaces*** that assist ***military fast jet*** pilots in mission planning and execution. For this purpose, three ***fully project-funded doctoral positions*** are available.

## Your tasks

- Conception, development, and implementation of:
  - Algorithms for intelligent ***manned-unmanned team coordination*** functions,
  - AI methods for ***multi-vehicle mission planning*** and re-planning,
  - AI methods based ***autonomous tactical UAV behavior generation***,
  - Intelligent ***cockpit interaction, pilot observation, and adaptive assistance*** functions,
- Integration into our ***networked jet cockpit simulator***,
- Execution and evaluation of ***pilot-in-the-loop experiments*** in the simulator.

## What you should bring

- An above-average completed ***academic degree*** (master level) in:
  - Engineering, Computer Science, Cognitive Science, or Natural Sciences.
- Ideally, with ***knowledge or interests*** in one or more of the following areas:
  - Modeling and Simulation, System and Software Development, Human-Machine Systems, Robotics, Flight and Mission Control, and Military Aviation.
- Proficiency in ***programming and software development*** (e.g., C/C++, Python, Linux) is advantageous.
- You have proficiency in both spoken and written English; knowledge of German is beneficial.
- Nationality and security constraints may be a factor. Talk to us.

## What we offer

- A strong ***booster for your career*** in the European FCAS / NGWS Program.
- Opportunity for a ***doctoral degree*** in aerospace engineering on the project topic.
- Employed as a ***research associate (100%)*** with a salary between 58.300 € - 62.800 € per year.
- Access to ***state-of-the-art IT and laboratory equipment*** at the ***MARC - HuMiCS Lab*** (see LinkedIn).
- Work within a ***young, dynamic, and international team***.
- Possibility to present your results at ***international conferences***.
- ***Attractive infrastructure*** for various sports and leisure activities on the university campus.
- ***Family-friendly*** environment with on-campus kindergarten and childcare facilities.
- ***Mobile work*** in agreement with management and team.

Submit your application (CV, certificates, ...) as soon as possible, best before 4 February 2024 to:

Univ.-Prof. Dr.-Ing. Axel Schulte  
*Flight Mechanics & Flight Guidance (LRT 13)*  
**University of the Bundeswehr Munich**  
[axel.schulte@unibw.de](mailto:axel.schulte@unibw.de)

The university aims to increase the proportion of women in academic positions and encourages female researchers to apply. Additionally, in case of equal qualifications and suitability, preference will be given to candidates with disabilities. *Please refer to further corporate and legal hints on second page (only available in German).*



*Wir sind eine Campusuniversität mit sehr guter Infrastruktur, betriebseigener Kinderkrippe und Kindergarten (Elterninitiative), einer Familienservicestelle mit Beratung und Hilfestellung für Universitätsangehörige zur besseren Vereinbarkeit von Familie, Pflege und Berufstätigkeit.*

*Die Eingruppierung erfolgt in die Entgeltgruppe 13 unter der Beachtung des § 12 TVöD im Hinblick auf die tatsächlich auszuübenden Tätigkeiten und der Erfüllung der persönlichen bzw. tariflichen Anforderungen.*

*Die Universität der Bundeswehr München strebt eine Erhöhung des Anteils von Wissenschaftlerinnen und Arbeitnehmerinnen an, Bewerbungen von Frauen werden ausdrücklich begrüßt. Personen mit Handicap werden bei gleicher Eignung besonders berücksichtigt.*

*Mit Ihrer Bewerbung erklären Sie sich einverstanden, dass Ihre persönlichen Daten für Zwecke der Bewerbung gespeichert, verarbeitet und an die am Bewerbungsverfahren beteiligten Stellen weitergeleitet werden. Nähere Informationen zum Datenschutz können Sie unter folgendem Link abrufen: <https://www.unibw.de/home/footer/datenschutzerklaerung>*