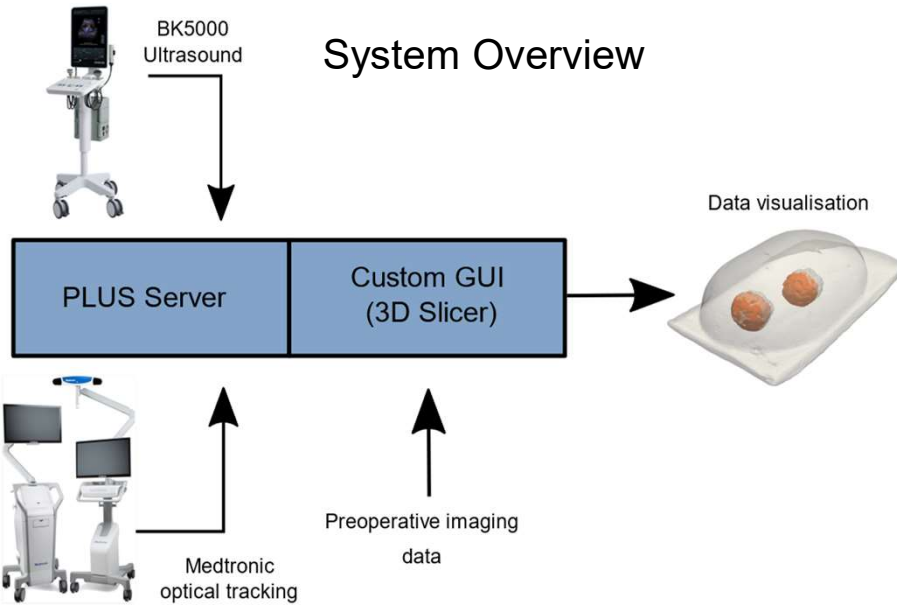


# Developing 'Skull Base Navigation' Software for Facial Nerve Surgery

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Clinical motivation - Intraoperative visualisation of facial nerve tumor using 3D ultrasound.

Existing software (3D Slicer/PLUS) have some of the required functionality, but the UI is not suited for clinical deployment in the operating theatre.

New software developed for deployment during surgery at Queen's Square Hospital.

- Real time data streaming from ultrasound (Python) and tool tracking (C++) devices.
- Combination of open source (PLUS/Slicer) and proprietary (Medtronic StealthLink) software.
- New GUI developed to streamline clinical workflow, with requirements defined by clinical team.
- Initial testing/development in Mock OR at UCL, further testing in-situ at Queen's Square.

