# Semester 1 P4P Meeting Notes

When: Tuesdays 1pm - 2pm

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## 01/03/2022

**Agenda:**

* Introduction to project
* Project timeline
* Meeting schedule
* Discuss initial steps

**Minutes:**

* SLAM developed for firefighters, navigate smokey environments and tracking team
* Produce static output for the work we get done. Make sure it is consistent instead of a burst of work
* Why do we use ROS (Ubuntu software)
* Investigate SLAM for first 2-3 weeks
* Discussed induction for labs, hardware is ready (C for dev board, C++/Python for ROS)f
* Settle on a configuration for the SLAM technique (e.g. mmWave is best for this…)
* Read as many papers as possible in the first 2-3 weeks and source as much information from these as we can

**Action Points:**

* Read at least 2 papers each week

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## 08/03/2022

**Agenda:**

* Lab Access Email
* Discuss papers
* Other questions

**Minutes:**

* Summary
* Comparison (table)
* Conclusion

**Action Points:**

* 2 weeks on research
* 2 weeks on literature review

## 15/03/2022

20-30 references.

Keep 2 weeks for literature review, try to get more sources this week. Currently we have 12 sources between us.

## 22/03/2022

Why fire fighters?

What else could we be researching

Meeting notes:

• Indoor navigation search

• Survey or review papers for sensors (quite long papers)

• Developed only for firefighters

• Lidar would be good but cannot work under smoke

• Make a prediction for a future plan (i.e probably dont need to use lidar)

• Additional computational load not necessary from other sensors

• Evidence to backup my claim of not using/using a hybrid solution

• Talk about algorithms depending on if appropriate for review, same with theorem

• Need it eventually ^ but not necessary. Need to give complete story of the literature discussed. Don't discuss the algorithms briefly. Focus on it in depth if you're gonna write about it

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## 29/03/2022

* Research statement of intent
* 1-3 references background scenario
* Research casualties per year for firefighters and what the reason was behind the casualties
* Reference whole statements, rather than specific/granular parts
* Look for journal papers - IEEE and ACM transactions?
* Look for resources that are sited most
* Conference papers 1-2 years
* Typically not beyond 5-10 years
* Convince ourselves first, then think about who our target audience is (generation gap)
* Add specifics to the table of sensors
* Detectable information (what of these would be useful to us?)
  + Conceptually how it works, what differs between the techniques
  + Multiple references to back up information in table
  + Biased claims from texas instruments
  + Look for a few more journal papers (within conference papers too)
  + CVPR
* (Probably shouldnt include time-critical, raises questions)
* Provide more accurate information for firefighters, currently nothing to base their plan on in a building

## 05/04/2022

* Can use scenarios to rule out certain technology
* Research doesn't need to be restricted to NZ.
* Reliable Databases: IEEE Transactions, ACM, Science Direct, Springer, arXiv
* Development board, Robot